18th IEEE International Conference on Automation Science and Engineering

Mexico City, Mexico, August 20-24, 2022



Final Program







Welcome to IEEE CASE2022

On behalf of the organizing committee, it is our pleasure to welcome all participants and friends to the IEEE 18th International Conference on Automation Science and Engineering (IEEE CASE2022), held in Mexico City on August 20-24, 2022 (with satellite site concurrently in Chengdu, China).

CASE is the flagship conference of the IEEE Robotics & Automation Society. It provides a primary international forum for automation researchers and practitioners to present and discuss their work. CASE2022 will include plenary and keynote sessions, contributed paper sessions, workshops and tutorial sessions, industry panel discussions, exhibitions from our corporate partners, and numerous social events and student activities. The theme of the conference is AI (Artificial Intelligence) Automation.

In the history of CASE conferences, this is the first time the conference will be held in Latin America, which is meaningful for local and international researchers, academics, and practitioners. It is also the first time the conference has a satellite site besides the main event and venue.

Mexico City is one of the largest cities in the world with rich cultural and historical attractions, and Chengdu is a charming ancient city and the hometown of the panda. CASE2022 will be a unique opportunity for attendees around the world to not only learn about the dynamics of automation science and engineering in Mexico and China, but also to experience these vibrant nations filled with passion, creativity, and diversity.

The Conference received submissions from more than 41 countries, including 6 workshop proposals, 29 special session proposals, 517 technical papers (among which 93 are joint RAL/CASE papers, 344 are full papers, 51 are presentation-only papers, and 29 are T-ASE presentation papers). In the final program, 385 technical papers (315 full papers and 70 presentation-only papers) were selected.

We appreciate the CASE community including the authors, the reviewers, and the editorial teams of CASE and RAL, as well as the T-ASE. Without their support we would not have been able to reach such a good number of submissions and high-quality evaluations. Finally, we would like to thank the steering committee, the organizing committee, and the volunteers for their hard work to make the hybrid, dual-site CASE2022 possible in the pandemic era.

We hope that CASE 2022 will be an exciting and memorable experience for all of you!



Xiaoou Li

General Chair
CINVESTAV-IPN
Mexico City, Mexico



Jingang Yi
Program Chair
Rutgers University
New Jersey, USA

Sponsors

Main Sponsors









Other Sponsors











Organizing Committee

General Chair

Xiaoou Li, CINVESTAV-IPN, Mexico

General Co-Chair

Chao-Bo Yan, Xi'an Jiaotong University, P.R. China

Program Chair

Jingang Yi, Rutgers University, United States

Program Co-Chairs

Qianchuan Zhao, Tsinghua University, P.R. China

Finance Chair

Chunsheng Yang, National Research Council, Canada

Publication Chair

Jie Song, Peking University, P.R. China

Workshop & Tutorial Chairs

Mengchu Zhou, New Jersey Institute of Technology, United States

Special Session Chairs

Giancarlo Fortino, University of Calabria, Italy Junliang Wang, Donghua University, P.R. China Yuqian Lu, University of Auckland, New Zealand Feng Ju, Arizona State University, United States Haibin Zhu, Nipissing University, Canada

Industrial & Exhibition Chairs

Antonio Ramírez, CINVESTAV-IPN, Mexico

Award Committee Chairs

Weiming Shen, Huazhong University of Science and Technology, P.R. China

Registration Chair

Bella Martínez Seis, UPIITA-IPN, Mexico

Local Arrangement Chairs

Juan Francisco Sabas, CINVESTAV-IPN, Mexico

Student Activity Chairs

Marco Morales Aguirre, Instituto Tecnológico Autónomo de Mexico, Mexico Zhile Yang, SIAT-Chinese Academy of Sciences, P.R. China

Website Comittee chair

Yan Gu, Purdue Univeristy, United States

Advisory Committee Chairs

Jingshan Li, Tsinghua University, P.R. China Wen Yu, CINVESTAV-IPN, Mexico

Steering Committee

Fan-Tien CHENG (Chair), Nat. Cheng Kung University

Nak Young CHONG, Japan Advanced Inst. of Sci. and Tech.

Mariagrazia DOTOLI, Politecnico di Bari

Martin FABIAN, Chalmers University of Tech.

Maria Pia FANTI, Politecnico di Bari

Cesare FANTUZZI, Univ. Modena & Reggio Emilia

Ken GOLDBERG, UC Berkeley

Xiaohong GUAN, Xian Jiaotong University

George Q. HUANG, University of Hong Kong

Qing-Shan JIA, Tsinghua University

Bengt LENNARTSSON, Chalmers University of Tech.

Jingshan LI, University of Wisconsin-Madison

Peter B. LUH, University of Connecticut

Dan O. POPA, University of Louisville

Spyros REVELIOTIS, Georgia Tech

Kazuhiro SAITOU, University of Michigan

Weiming SHEN, Western University

Leyuan SHI, University of Wisconsin - Madison

Yu SUN, University of Toronto

Birgit VOGEL-HEUSER, TU Munich

Michael WANG, Hong Kong University of Sci. & Tech.

Mengchu ZHOU, New Jersey Inst. Tech.

Conference Editorial Board

Editor In Chief

Li, Jingshan

Editors

Liu. Kaibo Tang, Ying Darabi, Houshang Yan. Chao-Bo Jia, Qing-Shan Song, Jie Lutz, Philippe Seatzu, Carla

Associate Editors

Chehade, Abdallah Du, Dongping Lee Sujee Moghaddass, Ramin Yang, Chunsheng Zhang, Xiangliang Byon, Eunshin Li, Congbo Zeng, Bo Burget, Pavel; Cavone, Graziana Chen, Nan Hung, Min-Hsiung Kim, Hyun-Jung Li, Lefei

Nishi, Tatsushi Pei, Zhi Xu, Qingsong Yugma, Claude Zhang, Zhi-Hai

Moench, Lars

Chinchali, Sandeep Jin. Ran Maier, Alexander Xian, Xiaochen Zhang, Xi Zou, Na Dassisti. Michele

Matta, Andrea Absi. Nabil Cao, Zhengcai Chang, Qing Delorme, Xavier

Ju, Feng Lee, Jun-Ho Mangini, Agostino Marcello

Morrison, James Notarnicola, Ivano Wang, Zheng Yan, Bing Zhang, Liang Zhao, Lei

Zhu, Kunpeng Faraut, Gregory Kong, Nan Sheng, Weihua Yang, Hui Banerjee, Ashis Fassi, Irene Laurent, Guillaume J. PB. Suiit

Shao, Chenhui Wang, Charlie C.L. Akesson, Knut Carli, Raffaele Franceschelli, Mauro

Kang, Qi

Mahulea, Cristian Nikolakopoulos, George Pedrielli, Giulia

Tong, Yin Voos, Holger Augusto, Vincent Garaix, Thierry Lee, Hyo Kyung Xie, Xiaolei Zhong, Xiang Chen, Heping Haddab, Yassine Liu, Xinyu Ren, Hongliang Tan, U-Xuan Yang, Liangjing Basile, Francesco Carpin, Stefano

Julius, Agung Ma, Ziyue

Modares, Hamidreza Parisio, Alessandra

Su, Rong

Vamvoudakis, Kyriakos G.

Xia, Li

Plenary Talks

Talk I: Robotic Manipulation: Sense, Touch, and Learn

Dr. Michael Y. Wang



Michael Yu Wang is a Professor and the Head of Department of Mechanical and Aerospace Engineering of Monash University. Before joining Monash University in 2022, he was the Founding Director of the Cheng Kar-Chun Robotics Institute. He also served on the engineering faculty at University of Maryland, Chinese University of Hong Kong, and National University of Singapore. He has numerous professional honors - Kayamori Best Paper Award of 2001 IEEE International Conference on Robotics and Automation, the Compliant Mechanisms Award-Theory of ASME 31st Mechanisms and Robotics Conference in 2007, Research Excellence Award (2008) of CUHK, and ASME

Design Automation Award (2013). He was the past Editor-in-Chief of IEEE Trans. on Automation Science and Engineering, and served as an Associate Editor of IEEE Trans. on Robotics and Automation and ASME Journal of Manufacturing Science and Engineering. He is a Fellow of ASME, HKIE and IEEE. He received his Ph.D. degree from Carnegie Mellon University.

Abstract

This presentation focuses on our research work on developing tactile sensors and dry adhesion skins for robotic hands with dexterous and versatile capability for grasping and adaptive manipulation. It also presents an overview of exploratory solutions to modeling of hyper-elastic soft robots, distributed control of soft actuators (polymers or fluids), strategies for soft manipulation, and rapid prototyping and fabrication of the sensors and elastic robots. I will showcase the ability to adjust fingertip pose for better contact using sensor feedback, especially for top-side gripping onto a nearly flat surface (smooth or rough) of an object with firm attachment. I will show practical applications in industrial automation and discuss the recent developments throughout the robotics community advancing in this promising direction.

Talk II: Zero-Carbon Intelligent Energy Systems and Energy Revolution

Dr. Xiaohong Guan



Xiaohong Guan received his B.S. and M.S. degrees in Control Engineering from Tsinghua University, Beijing, China, in 1982 and 1985, respectively, and his Ph.D. degree in Electrical and Systems Engineering from the University of Connecticut in 1993. He was a senior consulting engineer with Pacific Gas and Electric from 1993 to 1995. He visited the Division of Engineering and Applied Science, Harvard University from 1999 to 2000. From 1985 to 1988 and since 1995 he has been with Xian Jiaotong University, Xian, China, and has been as the Cheung Kong Professor of Systems Engineering and Director of Systems Engineering Institute since 1999, was the director of the State Key Lab for

Manufacturing Systems 1999-2009, Dean of School of Electronic and Information Engineering 2008-2018, and Dean of Faculty of Electronic and Information Engineering since 2019. From 2001 he has also been with the Center for Intelligent and Networked Systems, Tsinghua University, Beijing, China, and severed the Head of Department of Automation, Tsinghua University, 2003-2008.

Professor Guan is the member of Chinese Academy of Science and the Fellow of IEEE. His research interests include optimization of electrical power and energy systems, manufacturing systems, etc., and cyber-physical systems.

Abstract

This speech will discuss the new structure of green energy systems and how zero carbon emission energy system can be realized. In fact, economic energy storage technology is the key for fully utilizing new renewable energy sources. Production, storage and transportation, and utilization of hydrogen as a main energy source are introduced in the speech, and it is shown that hydrogen can become a major secondary energy source as important as electricity. The hydrogen based intelligent energy system will provide a new solution for energy supply and consumption with nearly zero-carbon emission and may lead to the energy revolution in the near future.

Talk III: Data analytics and optimization for smart industry

Dr. Lixin Tang



Professor Lixin Tang is the Vice President of Northeastern University, China, a member of Chinese Academy of Engineering, the Director of Key Laboratory of Data Analytics and Optimization for Smart Industry, Ministry of Education, China, the Director of Center for Artificial Intelligence and Data Science, and the Director and Chair Professor of the National Frontiers Science Center for Industrial Intelligence and Systems Optimization, Northeastern University. He is also a member of the discipline review group of the State Council for Control Science and Engineering, the Deputy Director of Artificial Intelligence Special Committee in Science and

Technology Commission, Ministry of Education, China, the Vice President of Operations Research Society of China (ORSC), and the Founding Director of Data Analytics and Optimization Society for Smart Industry of ORSC.

His research interests cover industrial intelligence and systems optimization theories and methods, covering industrial big data, data analytics and machine learning, deep learning and evolutionary learning, reinforcement learning and dynamic optimization, convex and sparse optimization, integer and combinatorial optimization, and computational intelligence-based optimization. For technologies, he mainly investigates on systems optimization technology for plant-wide production and inventory planning, production and logistics batching and scheduling, process optimization and optimal control; quality analytics technology such as process monitoring, equipment diagnosis, and product quality perception; industrial intelligence technology such as image and speech understanding and visualization. Meanwhile, he applies the above theories and technologies to engineering applications in manufacturing, logistics and energy systems.

He has published more than 137 papers in international journals such as IEEE Transactions on Evolutionary Computation, IEEE Transactions on Cybernetics, IEEE Transactions on Control Systems Technology, IEEE Transactions on Automation Science and Engineering, IEEE Transactions on Neural Networks and Learning Systems, IEEE Transactions on Power Systems, Operations Research, Manufacturing & Service Operations Management, INFORMS Journal on Computing, IISE Transactions and Naval Research Logistics. His paper published on IISE Transactions received the Best Applications Paper Award of 2017.

He currently serves as an Associate Editor of IISE Transactions, IEEE Transactions on Evolutionary Computation, IEEE Transactions on Cybernetics, Journal of Scheduling, International Journal of Production Research, and Journal of the Operational Research Society. Meanwhile, he is on the Editorial Board of Annals of Operations Research and serves as an Area Editor of the Asia-Pacific Journal of Operational Research.

Abstract

Data analytics is the frontier basic research direction of industrial intelligence and one of the driving forces to promote scientific development. Systems optimization is the core basic theory of decision-making in smart industry, as well as the heart and engine of data analytics. This talk will discuss some systems modeling methods and optimization solution methods we have been working on. The systems modeling methods are to quantitatively describe different practical problems with proper formulations,

including set-packing model, space-time network model, and continuous-time based model. The optimization solution methods include integer optimization, convex optimization, intelligent optimization, and dynamic optimization. This talk will also introduce systems optimization and data analytics of production, logistics, and energy in the steel industry, including: 1) production batching and scheduling in steelmaking/continuous casting, and hot/cold rolling operations; 2) logistics scheduling in loading operations, shuffling/reshuffling, and stowage; 3) data analytics-based energy optimization, including dynamic energy allocation and scheduling, energy analytics covering energy description, diagnosis and prediction; 4) data analytics, including temperature prediction of blast furnace, dynamic analytics of BOF steelmaking process based on multi-stage modeling, temperature prediction of reheat furnace based on mechanism and machine learning, and strip quality analytics of continuous annealing based on multi-objective ensemble learning.

Talk IV: Evolvable field-level automation architectures to leverage Al for physical manufacturing and logistics systems

Dr. Birgit Vogel-Heuser



Birgit Vogel-Heuser received her Dipl. Ing. degree in electrical engineering in 1987 and her Dr.-Ing. degree in mechanical engineering in 1990 from the RWTH Aachen, Germany. She acquired over ten years industrial experience in industrial automation. After different professorship positions, she was appointed to the Chair of Automation and Information Systems at the Technical University Munich in 2009. Her research is focusing on evolvable field-level automation and appropriate architectures for manufacturing and logistic systems. She is a Senior Member of the IEEE; IEEE RAS Distinguished Lecturer, Co-Chair of IEEE RAS TC Digital Manufacturing and Human-Centered Automation and a member of the National Academy of Science and

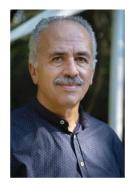
Engineering in Germany (acatech).

Abstract

Manufacturing and logistic systems operate for decades and need to evolve to manufacture new products, increase quality, energy, or overall efficiency. Consequently, automation hardware and software adaptation in the operation phase is crucial. Means to design such automation architectures compliant to Industry 4.0 are of high economic interest. The talk will introduce means to analyze existing automation architectures as a first step to refactoring. In the second step, the integration of Al into such architectures will be discussed. Finally, automation architectures that ease the adaptation of physical manufacturing and logistics systems will be presented.

Talk V: Incorporating causal knowledge in robot learning

Dr. Luis Enrique Sucar



Dr. L. Enrique Sucar is Senior Research Scientist at the National Institute for Astrophysics, Optics and Electronics, Puebla, Mexico. He received a master's degree in computer systems from the Stanford University and a PhD in Computing from Imperial College. He has been an invited professor at Imperial College, UK; the University of British Columbia, Canada; INRIA, France and CREATE-NET, Italy. Dr. Sucar received the National Science Prize from the Mexican President in 2016. He is Member of the National Research System, the Mexican Science Academy, a Senior Member of the IEEE, and Ex-President of the Mexican Academy of Computing. He has more than 400 publications in journals and conference

proceedings. He has served as president of the Mexican Al Society, has been member of the Advisory Board of IJCAI, and is associate editor of the journals Pattern Recognition and Computational Intelligence. He is interested in understanding and building intelligent systems that can interact with the real world, taking the best decisions under uncertainty, based on probabilistic and causal graphical models.

Abstract

Reinforcement learning has been applied to solve several complex problems in robotics and automation; however, learning optimal policies in continuous state and action spaces takes a very long time. Incorporating causal knowledge helps to focus exploration and avoid unnecessary actions, thus significantly reducing the number of episodes to obtain an optimal solution. Additionally, the causal models can be easily transferred to similar tasks. In this talk I introduce causal graphical models, including causal reasoning and discovery. I will then explain how to incorporate a causal model into a traditional reinforcement algorithm, and apply it to solve different problems, including robotic manipulation. Finally, I will present our recent work on learning and using a causal model simultaneously.

Panel Discussions

Special Panel: Machine Learning for Automation

Machine learning (ML) is changing the world, and in particular, the world of automation. So far, this wave of ML research has also influenced the main themes at IEEE CASE 2018-2021: Knowledge-based Automation, Smart Automation, Automation Analytics, and Data-Driven Automation. The critical question, however, is: How much of groundbreaking ML research has been performed in our community in recent years? Are we leading actors, or more followers, applying what others have already formulated? An AdHoc on Machine Learning for Automation has recently been initiated by the CASE steering committee. The goal is that CASE, T-ASE, and relevant TCs shall become important players in the tough scientific race around ML that is going on right now. This panel discussion will take that goal as a starting point, and then reason about how we can build strong automation related ML research, by identifying organizational and infrastructural support, but also niche areas where our research community should take the lead. The goal is simply to achieve results that counts, both concerning fundamental methodology development and applications in strategic areas, which cause not small but big improvements within the limited resources we still have on our common planet.

Moderator

Bengt Lennartson, Professor, Division of Systems and Control, Department of Electrical Engineering, Chalmers University of Technology, Gothenburg, Sweden.

Bengt Lennartson is a Professor of the Chair of Automation since 1999 at Chalmers University of Technology, Gothenburg, Sweden. He has been Associate Editor for Automatica and IEEE Transaction on Automation Science and Engineering, General Chair of IEEE CASE 2015, WODES 2008 and Dean of Education at Chalmers. He is the (co)author of 300+ peer reviewed international papers, and his research is currently focused on Al planning and learning, as well as sustainable production. He is IEEE Fellow.

Panelists

Maria Pia Fanti, Professor, Department of Electric and Information Engineering, Polytechnic University of Bari, Italy.

Maria Pia Fanti has been with the Department of Electrical and Information Engineering of the Polytechnic of Bari, Italy, since 1983 and she is currently a full professor of system and control engineering. Her research interests include management and modeling of complex systems, such as transportation, logistics and manufacturing systems. Prof. Fanti has published more than 315 papers and two textbooks on her research topics. She was senior editor of the IEEE TASE and she is AE of the IEEE Trans. on SMC: Systems. She was member at large of the Board of Governors of the IEEE SMCS, and currently she is member of the AdCom of the IEEE RAS, and chair of the RAS. Prof. Fanti was General Chair of the 2011 IEEE CASE and the 2019 IEEE SMC.

Weihong "Grace" Guo, Associate Professor, Department of Industrial and Systems Engineering, Rutgers, The State University of New Jersey.

Weihong "Grace" Guo is an Associate Professor in the Department of Industrial and Systems Engineering at Rutgers University-New Brunswick, USA. She earned her B.S. degree in Industrial

Engineering from Tsinghua University, China, in 2010 and her Ph.D. in Industrial & Operations Engineering from the University of Michigan, Ann Arbor, in 2015. Her research focuses on manufacturing data analytics, process monitoring, anomaly detection, quality evaluation, and system informatics. She is a member of IEEE, IISE, INFORMS, ASME, and Tau Beta Pi.

Qing-Shan Jia, Professor, Center for Intelligent and Networked Systems, Tsinghua University, Beijing, China.

Qing-Shan Jia is a full professor at Center for Intelligent and Networked Systems, Department of Automation, Tsinghua University, Beijing, China. His research interest is to develop an integrated datadriven, statistical, and computational approach to find designs and decision-making policies which have simple structures and guaranteed good performance. His work relies on strong collaborations with experts in manufacturing systems, energy systems, autonomous systems, and smart cities. He was an AE of IEEE T-ASE and T-AC, and is a member of the IEEE CASE Steering Committee.

Feng Ju, Associate Professor, School of Computing and Augmented Intelligence, Arizona State University, Phoenix, USA.

Dr. Feng Ju is an Associate Professor with the School of Computing and Augmented Intelligence, Arizona State University. His research interests include machine learning and optimization of smart manufacturing systems and additive manufacturing. He was a recipient of multiple awards, including Dr. Hamed K. Eldin Outstanding Early Career IE in Academia Award, the Best Paper Awards in IISE Transactions and IFAC MIM, and the Best Student Paper Award in IEEE CASE.

Peter B. Luh, Professor, Department of Electrical Engineering, National Taiwan University Electrical and Computer Engineering, University of Connecticut, Storrs, Connecticut, USA.

Peter Luh was with U. Connecticut 1980-2020, and was a Board of Trustees Distinguished Professor and the SNET Professor of Communications & Information Technologies upon retirement. He is now a Distinguished Chair Professor at National Taiwan University. He was the founding EiC of T-ASE, a CoFounder of CASE, and is a member of the IEEE Publication Services and Products Board, and the Chair of its Publishing Conduct Committee. His research includes intelligent manufacturing, smart grid, and energysmart buildings, with optimization cutting across them. He received RAS 2013 Pioneer Award, 2017 George Saridis Leadership Award, and T-ASE 2019 Best Paper Award.

Frank C. Park, Professor of Mechanical Engineering, Seoul National University, Seoul, South Korea. Frank C. Park is Professor of Mechanical Engineering and also Vice-Dean of the Graduate School of Data Science at Seoul National University. He received the B.S. in EECS from MIT in 1985, the Ph.D. in applied mathematics from Harvard in 1991, and was on the faculty of the University of California, Irvine from 1991 to 1994 before joining SNU in 1995. He is a fellow of the IEEE, and has held adjunct faculty positions with the HKUST Robotics Institute in Hong Kong, the Interactive Computing Department at Georgia Tech, and the NYU Courant Institute. His research interests include robotics, computer vision, mathematical data science, and related areas of applied mathematics. He is a former Editor-in-Chief for the IEEE Transactions on Robotics, developer of the EDX course Robot Mechanics and Control I-II, and author (with Kevin Lynch) of the textbook Modern Robotics: Mechanics, Planning, and Control (Cambridge University Press, 2017). He is president of the IEEE Robotics and Automation Society (2022–2023), and founder and CEO of the industrial AI startup Saige Research (http://saige.ai).

Karinne Ramirez-Amaro, Associate Professor, Division of Systems and Control, Department of Electrical Engineering, Chalmers University of Technology, Gothenburg, Sweden.

Dr. Karinne Ramirez-Amaro is an Associate professor at Chalmers University of Technology since March 2022. Previously, she was a post-doctoral researcher at the Technical University of Munich (TUM), Germany. She completed her Ph.D. (summa cum laude) at the Department of Electrical and Computer Engineering at TUM in 2015. She has received different awards, e.g. the price of excellent Doctoral degree for female engineering students and the Google Anita Borg scholarship. In 2022, Karinne was elected as member of the Administrative Committee (AdCom) from the IEEE Robotics and Automation Society (RAS) and she is the chair of the IEEE RAS Women in Engineering (WiE). Her research interests include Explainable AI, Semantic Representations, Cause-based Learning Methods, Collaborative Robotics, and Human Activity Recognition and Understanding.

MengChu Zhou, Professor, Department of Electrical and Computer Engineering, New Jersey Institute of Technology, Newark, USA.

MengChu Zhou is Distinguished Professor at New Jersey Institute of Technology. His interests are in automation, Internet of Things, and AI. He has 1000+ publications including over 600 IEEE transactions papers, 12 books, and 30 patents and 29 book-chapters. He is Fellow of IEEE, IFAC, AAAS, CAA and NAI.

Industry Panel I: Artificial Intelligence in Mexican Industry

Artificial Intelligence (AI) uses computer algorithms to simulate human intelligence, mainly focused on learning and decision-making processes. Due to the maturity of the area and the new advances in AI branches such as machine and deep learning, the industrial applications of AI have been increasing rapidly. Today AI is present in the algorithms to drive cars, land planes, render images, make decisions, among many other applications. This growth makes us wonder, what is the future of AI in autonomous vehicles (cars, planes)? How will AI solve problems in artificial vision or in autonomous surgical systems? Regulations and ethical questions must be addressed when using AI to solve critical problems. This panel looks at how Continental, Intel and Wizeline view the use of AI to solve industrial problems.

Moderator

Andres Mendez Vázquez, Professor/Researcher, CINVESTAV-IPN

Panelists

Dr. Andres Mendez Vázquez

Dr. Mendez is currently with Cinvestav Guadalajara, his research interest fields are the artificial intelligence, mainly the areas of machine and deep learning. He has participated in many projects of Machine Learning, Artificial Intelligence and Deep Learning for several startup, USA Army, Mexican Air Force, Oracle MDC, IBM Mexico, etc.

Dr. Alberto de Obeso

Dr. de Obeso is with Wizeline as the Director of Artificial Intelligence. His ultimate goal as a professional is to deliver solutions with clear advantages over classic approaches by combining sound software design principles with powerful techniques derived from the Artificial Intelligence realm. He has 18+ years of experience developing software and data-driven solutions in different languages and platforms for complex organizations. 7+ years of performing increasingly demanding leadership roles, his intent is to keep growing on this path. During his doctoral studies in the UK, he explored complex problem-solving behavior from a computational perspective. He is a postgraduate teacher at ITESO and TEC de Monterrey, and has two patent applications.

Dr. Julio Zamora

Dr. Zamora is Principal Engineer and Senior Research Scientist Manager at Intel Labs, Leading globally the Human Robot Collaboration Group as a part of Intelligent System Research Group. He received a master's degree in computer sciences and PhD in Electric Engineering from CINVESTAV. Dr. Zamora had a post-Doctoral position at KAIST, Korea. He was nominated for the W.K. Clifford international price for his contributions to geometric algebra, introducing the Quadric Geometric Algebra and the formulation of Robot dynamics in terms of octonions. He is member of the National Research System, the Mexican Association for Computer Vision, Neural Computing and Robotics, and Senior member of IEEE. He has more than 60 patents in process and more than 30 publications in journals, book chapters and conference proceedings. His research interests include Artificial Intelligence, Computer Vision, Geometric Algebras, Robotics, and Image Processing.

MBA Edú Brasil López San Vicente

He is currently the Director of Research and Development of Continental Automotive Guadalajara. He is responsible for the innovation and business strategy of "Vehicle Networking and Information" in Mexico, as well as the administration and direction of the engineering community of all its business units and core areas of the sector "Automotive Technologies" of Continental Automotive in Mexico. He has more than 20 years of experience in development and innovation of electronic products for the automotive and telecommunications industries, working in Mexico, Japan, USA and Germany. He has led worldwide teams for the innovation, research and development of mechanical products, and he has designed strategies to establish engineering centers in Mexico and led the transfer of responsibilities from Japan and the United States to Mexico.

Industry Panel II: Trends in Industrial Automation

This session explores the latest trends in adoption of robotics, artificial intelligence, machine vision and related automation. Real world examples of leading applications in major industries such as manufacturing, warehousing & distribution, and more will be discussed, as well as the impacts of increased automation on jobs.

Moderator

Jeff Burnstein, President of the Association for Advancing Automation (A3)



Jeff Burnstein is the President of A3, the leading North American trade group representing over 1100 global companies involved in robotics, artificial intelligence, vision, motion control and related automation technologies. Burnstein joined the association in 1983 and has held a variety of senior positions, culminating in his promotion to President in 2007. He is a frequent commentator in the media, often discusses automation issues with policy makers, and regularly speaks at global

conferences on issues such as the impact of automation on jobs and the future of automation beyond the factory floor. Burnstein also serves on the Executive Board of the International Federation of Robotics (IFR).

Panelists



Manuel Sordo, APERA AI, Chief Commercial Officer

Manuel brings more than 25 years of sales and business management experience to Apera AI. He has considerable commercial expertise in the automation and robotics markets. Most recently, Manuel was Universal Robots' Regional President for Latin America. Manuel holds an MBA from California Intercontinental University.



Denis Pineda Universal Robots-Latam, Regional President, Latin America

Denis started his technology career in Universal Robots in 2016 when the transition from traditional robotics to collaborative robots market happened. After developing South America market for 5 years, he recently was invited to lead Universal Robots Latin America as Reginal President. Denis is an industrial engineer, he obtained

Executive MBA at BSP (Business School São Paulo) in 2016, and diplomas on Design Thinking and Creativity for Business at INSEAD in 2020. He has 20 years career mainly on the automotive industry, in areas of sales, engineering, purchasing, etc., and consistent international experience on global projects.



Luis Quintanilla, Omron, Business Developer Specialist Robotics

Luis Quintanilla, currently working at OMRON as Robotics Business Developer for Mexico, has more than 12 years of experience in automation complemented by knowledge of vision, safety, sensors, and control. He has bachelor's degree in Mechatronics Engineering and Master in Sales Management. This experience complements the development of all types of Robotics projects with a commercial and

technical profile. He has successfully participated in the implementation of engineering projects in different industries such as Automotive, Digital, and Medical.

Workshops

Workshop I: Machine Learning for Automation

The enormous interest in artificial intelligence and especially machine learning (ML) among scientists in different research fields has recently also influenced the focus of our CASE conference. This is manifested by the main themes at IEEE CASE 2018-2021: Knowledge-based Automation, Smart Automation, Automation Analytics, and Data-Driven Automation. Since learning is such an important tool in many automation solutions, including data-based model generation, online optimization, and adaptive control, it is crucial to increase our activities in this field even further, to become an important player in the tough scientific race around ML that is going on right now.

The goal of this workshop is therefore to create a deeper interest and understanding of ML, but also to identify niche areas of ML in automation, where our research community should take the lead. More specifically, we want to present some interesting ongoing research activities, but also to discuss and propose what we believe are important research directions where automation can play an important role in this dynamic research area.

The presentations in this workshop will be given by members of a recently created AdHoc on Machine Learning for Automation. This AdHoc is focused on how to strengthen research activities, but also organization and infrastructure around ML research within automation. The workshop will therefore conclude with an open discussion to get interesting inputs for future activities within this challenging research field.

Organizers:

Bengt Lennartson, Chalmers University of Technology Qing-Shan Jia, Tsinghua University Maria Pia Fanti, Polytechnic University of Bari Peter B. Luh, University of Connecticut Jingang Yi, The State University of New Jersey Karinne Ramirez-Amaro, Chalmers University of Technology

Workshop II: Machine Learning for Additive Manufacturing

Quality and productivity are critical for additive manufacturing (AM). With increased availability of AM product data, Machine Learning for AM (ML4AM) has become a viable strategy for knowledge discovery and performance enhancement. This workshop provides tutorial on engineering-informed data analytics framework to facilitate efficient machine learning of AM product data, process monitoring and defect detection for the new wire arc additive manufacturing (WAAM), and deep learning-based monitoring of weld penetration for WAAM application.

Organizers:

Qiang Huang, University of Southern California Zengxi Pan, University of Wollongong Yuming Zhang, University of Kentucky

Workshop III: Al for Efficiency and Sustainability in Industrial Disassembly Processes

Efficiency and sustainability will be the key for the future factory, whose main focus will be on efficient and sustainable industrial processes. A sustainable production, an efficient use of the resources, and an increase in the recovered and reused products will be crucial to reduce the impact of the production on the environment, in compliance with the upcoming Industry 5.0 paradigm. Artificial intelligence (AI) and robotics are leading to deep workplace innovation, optimizing human-machine interactions, and giving more importance to workers. But the environmental goals can only be achieved by rethinking the production processes in order to limit the environmental impact. Disassembly is an industrial process that will have to be continuously optimized to increase efficiency and sustainability in years to come. Disassembly extracts valuable components/materials from end-of-life goods for reuse and recycling. It is also used in product refurbishment when products are restored to full manufacturer conditions by running quality tests and replacing broken or defective parts. Refurbishing products is a great opportunity for sustainability as it gives new life to used products instead of producing new ones, thereby providing consumers with quality products at an affordable price. Statistics say that the refurbished market for consumer electronics is estimated to be \$10 billion. Disassembly consists of a series of tasks performed in lines made up of workstations where workers may be assisted by robots. Making these lines as efficient and sustainable as possible includes the design, the optimization, and the improvement of the collaborations between workers and machines. Artificial Intelligence (AI) can help deal with the complexity of these problems to find and implement solutions that increase efficiency and reduce the impact of production on the environment. This Workshop aims to collect the latest research and achievements and discuss the progress regarding advanced AI techniques for optimal industrial disassembly processes.

Organizers:

Xiwang Guo, Liaoning Petrochemical University Jiacun Wang, Monmouth University

Workshop IV: Benchmarking Coaxial Rotor Systems to Optimize Performance in Autonomous Applications

In the UAV field, the efforts to develop drones with more payload and flight time capacity are constant. Coaxial multirotor drones offer high payload capacity in a relatively small vehicle footprint [1]. However, compared to regular 'flat' multirotors, they exhibit a much lower efficiency. The content covered in this proposed tutorial is based on a very recent work of the authors where they developed a control allocation method in which experimental results showed an increase in efficiency of up to 11% compared to the current state-of-the-art [2]. Additionally, the tutorial also covers the operation of an open-source benchmarking platform developed by the authors with the purpose of testing and optimizing the performance of coaxial rotor systems. Therefore, the tutorial will provide the participants with all the tools needed to perform experiments, develop, and implement control allocation methods to improve the efficiency of coaxial rotor systems in autonomous applications.

Organizers:

Minas Liarokapis, The University of Auckland Joao Buzzatto, The University of Auckland

Workshop V: Semiconductor Smart Manufacturing Technology

Al-based Smart Manufacturing Systems (AISMS) incorporates various technologies, i.e., Internet of Things (IoT), big data analytics, system modeling, and Artificial Intelligence (AI). Such technologies are permeating different aspects of manufacturing industry and make it smart and capable of addressing challenges such as interoperability, decentralization, distributed control, real-time manufacturing process control, service orientation, and maintenance optimization. As one of the most sophisticated manufacturing industries, semiconductor industry has been actively adopting AISMS to boost productivities.

This is a half-day workshop on semiconductor smart manufacturing technology workshop. The purpose of this workshop is to share with IEEE communities the recent advancement and development of semiconductor smart manufacturing technologies and relevant applications ranging from semiconductor tools scheduling, Al based defect detection and classification, smart equipment dispatch, intelligent process control, etc. The workshop aims to provide technical discussion forum for researchers from different fields and promote interdisciplinary and multidisciplinary research collaboration.

Organizers:

Yan Qiao, Macau University of Science and Technology Bin Liu, IKAS Industries (Guangdong) Company, Ltd.

Workshop VI: Robot Teams: Challenges, Models, and Methodologies

Multi-robot teams have been used in a wide range of applications, including surveillance, inspection, rescue, automation, and logistics. Due to the variety of critical components in these applications, the collaboration between agents in the robot team can quickly become a challenging problem, particularly when there is a variety of hardware, battery life, size, and functionalities of the robots that are moving in a dynamic environment. Because the robots are working in a dynamic environment, they need to dynamically change their behaviors to adapt to the state of the environment in a way that is fully coupled to the type of agent. For example, depending on the robot, some environmental constraints can be waived or become more restricted. The tasks need to be assigned and managed precisely to achieve the goals while minimizing the execution time and energy costs and avoiding collisions.

Role-Based Collaboration (RBC) is a flexible strategy that can facilitate agent collaboration between agents in centralized or decentralized management by using the Environments – Classes, Agents, Roles, Groups, and Objects (E-CARGO) model. Research shows that the RBC methodology can be used to manage a robot team's performance by optimizing task allocations. However, a critical part of RBC is the role assignment which requires a pertinent evaluation matrix, i.e., Q, that reflects the qualification of each agent for each role.

Organizers:

Haibin Zhu, Nipissing University Junqi Zhang, Tongji University Behzad Akbari, Nipissing University Peng Zu, Tongji University YuXuan Lin, Tongji University

Main Conference Venue

Sheraton Maria Isabel Hotel, Mexico City

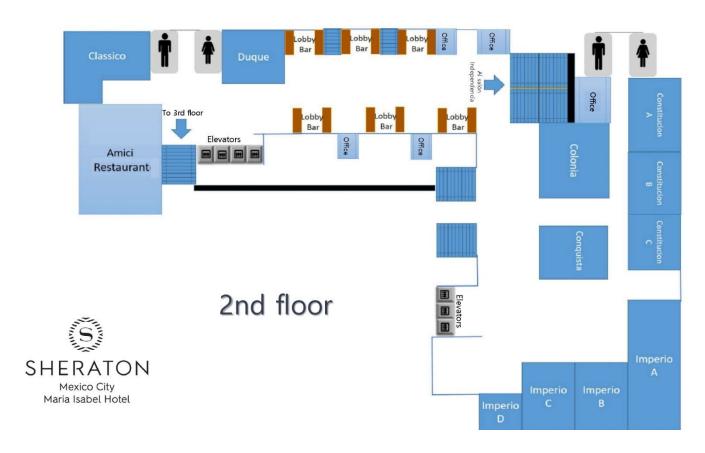
Address: Av. Paseo de la Reforma 325, Cuauhtémoc, 06500 Mexico City, Mexico



The luxury 5-star Sheraton Maria Isabel Hotel locates in the heart of Mexico City surrounded by the Zona Rosa district, you will be steps from extravagant shopping centers, restaurants, nightlife, monuments of Angel, the city park Bosque de Chapultepec, museums, and historic grounds such as the National Palace, Palacio de Bellas Artes, and Metropolitan Cathedral.

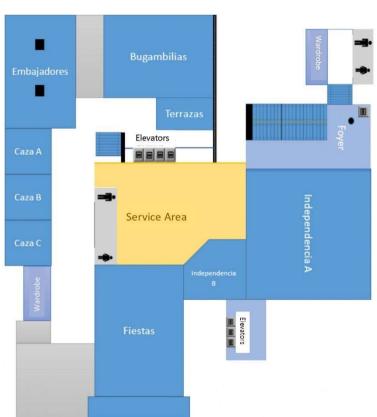
Within the Sheraton Maria Isabel Hotel, enjoy gourmet meals at a selection of restaurants or sip cocktails in the lobby bar. When you need some relaxation, enjoy our heated outdoor pool and fitness center with a sauna, or slip off to your stylish suite featuring thoughtful amenities with gorgeous views of the city and the Sheraton Signature Sleep Experience beds.

Travel information: http://cdmxtravel.com/en/





3rd floor



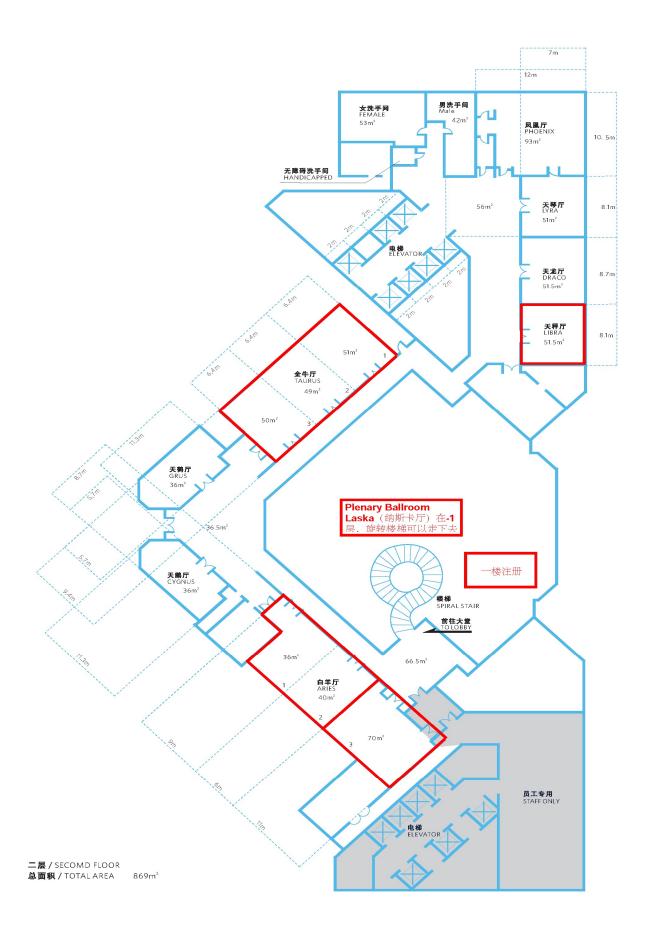
Satellite Conference Venue

Hilton Chengdu Hotel, Chengdu, P.R. China

Address: No. 666 Tianfu Av., Chengdu, 610093, China



Hilton Chengdu hotel is in Chengdu's business district, the Tianfu New District, in a short walk distance from Tianfu Software Park, the metro, and Century City International Convention & Exhibition Center. New Century Global Mall is six kilometers away and 40 minutes from the Chengdu Panda Breeding Research Center. The amenities include spa, fitness center, and pool. You can enjoy all-day dining and drinks at hotel restaurants.



Health & Safety

The health and safety of our conference attendees is our top priority. CASE2022 will be following all <u>local</u> <u>quidelines</u> and adhering to venue-specific standards to host the event safely and effectively.

Increased Sanitization and Hygiene

- Hand sanitizing products will be made available throughout the conference hotel
- Sanitizing wipes will be provided in every room for speaker use at the podium
- Audio-visual equipment such as keyboards, laser pointer, and mics will be wiped down with sanitizer wipes between each session and at regular intervals throughout the day

What You Can Do to Help Onsite

- Masks are mandated in all indoor public areas in Mexico City. Wearing a mask in indoor public space can help protect you and everyone else close to you.
- Wash your hands frequently with soap and water for 20 seconds or use an alcohol-based hand sanitizer.
- Follow the <u>World Health Organization</u>'s (WHO) and the Mexico Secretary of Public Health guidelines to prevent the spread of infectious diseases at the event
- Discourage physical greetings like handshakes, high fives, fist or elbow bumps, and hugs
- Wash your hands frequently with soap and water for 20 seconds or use an alcohol-based hand sanitizer
- Maintain social distancing between yourself and anyone who is coughing or sneezing
- If you have fever, cough, and difficulty breathing, seek medical care immediately.

Local Antigen or PCR Testing

Many phamacies and laboratories can do COVID test, ask the address of the branch near to where you are.

- Farmacia San Pablo
- Farmacia Ahorro
- Laboratorio Eugenio Sue
- Laboratorio Medico Polanco
- Laboratorio Chopo
- Etc.

If you participate CASE2022 on the satelite site (Chengdu), please prepare according to the latest local COVID-19 prevention requirements.

Thank you for your cooperation!

Program Overview

Program Overview MEXICO CITY

Saturday, August 20th	Sunday, August 21st	Monday, August 22nd	Tuesday, August 23rd	Wednesday, August 24th
9:00-12:15 Workshops	8:00-8:10 Opening Remarks 8:10-9:00 Plenary I 9:00-9:10 Break 9:10-10:00 Special Panel 10:00-10:15 Coffee Break 10:15-12:15 Best Conference & Best Application Papers	8:10-9:00 Plenary II 9:00-9:10 Break 9:10-10:00 Industry Panel I / Best Healthcare Automation Papers 10:00-10:15 Coffee Break 10:15-12:15 Industry Panel II /Best Student Papers	8:10-9:00 Plenary III 9:00-9:10 Break 9:10-10:00 Awards Ceremony 10:00-10:15 Coffee Break 10:15-12:15 7 Technical Sessions	9:00-12:15 Technical tours (depends on COVID-19 policy)
Lunch	Lunch With Leaders	Women in Engineering Luncheon	Job Opportunities in Industry Luncheon	
13:45-17:45 Workshops	13:45-15:45 7 Technical Sessions 15:45-16:00 Coffee Break 16:00-17:45 7 Technical Sessions	13:45-15:45 7 Technical Sessions 15:45-16:00 Coffee Break 16:00-17:45 7 Technical Sessions	13:45-15:45 7 Technical Sessions 15:45-16:00 Coffee Break 16:00-17:45 7 Technical Sessions	
19:00-21:00 Welcome Reception		19:00-21:00 Conference Banquet	19:00-21:00 Farewell Reception	

Program Overview CHENGDU

Saturday, August 20th	Sunday, August 21st	Monday, August 22nd	Tuesday, August 23rd	Wednesday, August 24th
	8:00-10:00 3 Technical Sessions 10:00-10:15 Coffee Break 10:15-12:15 3 Technical Sessions	8:00-10:00 Plenary I & II 10:00-10:15 Coffee Break 10:15-12:15 3 Technical Sessions	8:00-10:00 3 Technical Sessions 10:00-10:15 Coffee Break 10:15-12:15 2 Technical Sessions	8:00-12:15 Technical tours
	Lunch	Lunch	Lunch	
14:00-17:00 Registration 18:30-20:30 Welcome Reception	14:00-17:00 Workshops	14:00-17:00 Student Activities 18:30-20:30 Conference Banquet	14:00-17:00 Student Activities 18:30-20:30 Farewell Reception	14:00-17:00 Technical Tours

Program at a Glance

Sessions in green background are on Mexico City Site Sessions in blue background are on Chengdu site

CASE 2022 Program at a Glance Saturday August 20, 2022

Track M1	Track M2	Track M3	Track M4	Track C1	Track C2	Track C3			
			05:30-07:30 SaWRBr						
	MIX (first floor)								
	Welcome Reception (Chengdu)								
09:00-12:30 SaWAM1		09:00-12:30 SaWAM3	09:00-12:30 SaWAM4	1					
Imperio A		Constitucion B	Constitucion C						
Workshop 1 (AM)		Workshop 3	Workshop 4						
			12:30-14:00 SaLuMBr						
			Londo Docale 4						
14:00-17:00 SaWBM1	14:00-17:00 SaWBM2		Lunch Break 1						
Imperio A	Constitucion C								
Workshop 1 (PM)	Workshop 2								
	•	•							
		00 SaWMBr		19:00-21:00 SaAC1	19:00-21:00 SaAC2	19:00-21:00 SaAC3			
		Angel		Aries 1 & 2	Aries 3	Taurus			
	Welcome	Reception		Automation for Data	Automation for	Foundations of Automation			
				Analytics (Chengdu)	Manufacturing and Logistics 1 (Chengdu)	1 (Chengdu)			
					Logistico i (Oriorigua)				
			21:00-21:15 SaCo Br						
			Room T1						
			Coffee Break 1 (Chengdu)						
				21:15-23:15 SaBC1	21:15-23:15 SaBC2	21:15-23:15 SaBC3			
				Aries 1& 2	Aries 3	Taurus			
				Human-Robot Collaboration for Futuristic	Data Analytics and Optimization for	Machine Learning and Als for Quality & Reliability			
				Human-Centric Smart	Manufacture-Circulation	Assessment and			
				Manufacturing (Chengdu)	Industrial System	Enhancement (Chengdu)			
				3 (1 119)	(Chengdu)	(3.03.07)			
			23:15-24:00 SaLuCBr						
			MIX (first floor)						
			Lunch Break 1 (Chengdu)						

28

CASE2022 Program at a Glance Sunday August 21, 2022

Track M1	Track M2	Track M3	Track M4	Track M5	Track M6	Track M7	Track C1	Track C2	Track C3
					SuLuC1_Br				
				Roo	m T8				
								01:00-04:00	01:00-04:00
								SuWCC2	SuWCC3
								Aries 1 & 2	Aries 3
								Workshop 5	Workshop 6
				07.45.00	:00 SuOBr			(Chengdu)	(Chengdu)
					Fiestas				
					Session				
					:00 SuP1L				
					Fiestas				
				Plei	nary I				
				09:00-09:	10 SuS1Br				
					Fiestas				
					ak 1				
					0:00 SuIP Fiestas				
					al Panel				
					5 SuCo1 Br				
					and Floor				
					Break 1				
					15 SuBCAP				
					Fiestas				
			Best Con	ference and Applic	cation Paper Award	s Session			
				12:15_12:2	0 SuLuM Br				
					mbilias				
					Break 2				
13:30-15:30	13:30-15:30	13:30-15:30	13:30-15:30	13:30-15:30	13:30-15:30	13:30-15:30			
SuAM1	SuAM2	SuAM3	SuAM4	SuAM5	SuAM6	SuAM7			
Constitucion A	Constitucion B	Constitucion C	Imperio A	Imperio B	Imperio C	Colonia			
Additive	Cyber-Physical	Estimation and	Computer Vision	Planning,	Agricultural	Automation at			
Manufacturing	Production	Calibration	for Manufacturing	Scheduling and	Automation 1	Micro-Nano Scales			
	Systems and		and Transportation	Coordination 1		1			
	Industry 4.0 1		1	45.00 45.4	 5 SuCo2 Br				
					s SuCoz_Br 2nd Floor				
					Break 2				
15:45-17:45	15:45-17:45	15:45-17:45	15:45-17:45	15:45-17:45	15:45-17:45	15:45-17:45			
SuBM1	SuBM2	SuBM3	SuBM4	SuBM5	SuBM6	SuBM7			
Constitucion A	Constitucion B	Constitucion C	Imperio A	Imperio B	Imperio C	Colonia			
	Computer Vision in	Human Factors	Motion and Path	Foundations of	Semiconductor	Healthcare			
Vehicle	Automation 1	and Human-In-	Planning and	Automation and	Manufacturing and				
Navigation		The-Loop	Control 1	Optimal/Robust	Production	Automation			
				Control	Scheduling				

19:00-20:00 SuP2L Ballroom Laska Plenary II (Chengdu)			
20:00-21:00 SuP3L			
Ballroom Laska			
Plenary III (Chengdu)			
21:00-21:15 SuCo3_Br			
Room T8			
Coffee Break 2 (Chengdu)			
	21:15-23:15	21:15-23:15	21:15-23:15
	SuCC1	SuCC2	SuCC3
	Aries 1 & 2	Aries 3	Taurus
	Automation at	Automation for	Foundations of
	Micro-Nano Scales		Automation 2
	2 (Chengdu)	Logistics 2	(Chengdu)
		(Chengdu)	
23:15-24:00 SuLuC2_Br			
MIX (first floor)			
Lunch Break 2 (Chengdu)			

CASE2022 Program at a Glance Monday August 22, 2022

Track M1	Track M2	Track M3	Track M4	Track M5	Track M6	Track M7	Track C1	Track C2	Track C3
	00:00-01:00 MoLuC1_Br								
					m T8 :00 MoSA				
					.00 MOSA m T9				
					ties (Chengdu)				
				05:30-07:30	O MoBaC_Br				
	Ballroom Laska								
	Conference Banquet (Chengdu)								
	08:00-09:00 MoP1L Salon Fiestas								
					ary IV				
					0 MoCo1_Br				
				Foyer 2	2nd Floor				
				Coffee	Break 3		 		
		09:10-10:10 MoIP1	1			C	9:10-10:10 MoAw1 Salon Fiestas	Н	
		Imperio A Industrial Panel 1				Rest Healthcare	e Automation Pape	r Award Session	
		10:10-11:10 MoIP2	2			1	10:10-11:50 MoAw2	S	
		Imperio A					Salon Fiestas		
		Industrial Panel 2				Best St	udent Paper Award	Session	
				10.00.10.0	244 1 44 5				
					0 MoLuM_Br mbilias				
					Break 3				
13:30-15:30	13:30-15:30	13:30-15:30	13:30-15:30	13:30-15:30	13:30-15:30	13:30-15:30			
MoAM1	MoAM2	MoAM3	MoAM4	MoAM5	MoAM6	MoAM7			
Constitucion A	Constitucion B Cyber-Physical	Constitucion C	Imperio A Computer Vision	Imperio B Planning,	Imperio C Agricultural	Colonia			
Motion and Robot Control 1	Production	Deep Learning in Robotics and	for Manufacturing	Scheduling and	Agricultural Automation 2	Automation in Construction and			
Control 1	Systems and		and Transportation	Coordination 2	/ tatomation 2	Production			
	Industry 4.0 2		2						
					5 MoCo2_Br				
					nd Floor Break 4				
15:45-17:45	15:45-17:45	15:45-17:45	15:45-17:45	15:45-17:45	15:45-17:45	15:45-17:45			
MoBM1	MoBM2	MoBM3	MoBM4	MoBM5	MoBM6	MoBM7			
Constitucion A	Constitucion B	Constitucion C	Imperio A	Imperio B	Imperio C	Colonia			
Industrial Robots	Computer Vision in		Motion and Path	Intelligent and	Machine Learning				
	Automation 2	Robotics and Automation 2	Planning and Control 2	Flexible Manufacturing 1	and its Application	Adaptive Systems			
		/ (dtorridtion 2	Control 2	- Wanaradaning 1			19:00-21:00	19:00-21:00	19:00-21:00
							MoCC1	MoCC2	MoCC3
							Aries 1 & 2	Aries 3	Taurus
	19:00-21:00 MoBaM_Br						Simulation and Al	Modeling, Control,	Deep Learning in
	Salon Fiestas						(Chengdu)	and Scheduling of Robotized	Robotics and Automation 3
	Conference Banquet							Manuf.acturing	(Chengdu)
								Syst. (Chengdu)	(Gridingua)

21:00-21:15 MoCo3_Br Room T8			
Coffee Break 3 (Chengdu)			
	21:15-23:15	21:15-23:15	21:15-23:15
	MoDC1	MoDC2	MoDC3
	Aries 1 & 2	Aries 3	Taurus
	Smart Healthcare	Manufacturing and	
	Services and	Service Systems	
	Systems	in the New Era 1	
	(Chengdu)	(Chengdu)	
23:15-24:00 MoLuC2_Br	<u> </u>		
MIX (first floor)			
Lunch Break 3 (Chengdu)			

CASE2022 Program at a Glance Tuesday August 23, 2022

Track T1	Track T2	Track T3	Track T4	Track T5	Track T6	Track T7			
	00:00-01:00 TuLuC1_Br								
			Room T8						
	05:30-07:30 TuFC_Br								
	MIX (first floor)								
		F	arewell Reception (Chengd	lu)					
			08:00-09:00 TuPL						
	Salon Fiestas								
			Plenary V 09:00-09:10 TuCo1 Br						
			Salon Fiestas						
			Break 2						
			09:10-09:45 TuAwC						
			Salon Fiestas						
			Award Ceremony						
			09:45-10:00 TuCo2_Br						
			Foyer 2nd Floor						
			Coffee Break 5						
10:00-12:00 TuAT1	10:00-12:00 TuAT2	10:00-12:00 TuAT3	10:00-12:00 TuAT4	10:00-12:00 TuAT5	10:00-12:00 TuAT6	10:00-12:00 TuAT7			
Constitucion A	Constitucion B	Constitucion C	Imperio A	Imperio B	Imperio C	Colonia			
Advances and New	Machine Learning-Enabled		Advances of Machine	Manufacturing and Service	Manufacturing Data	Manipulation Planning and			
Challenges in Logistics	Modeling Technology and	Cyber-Physical	Learning for Smart	Systems in the New Era 2	Science	Control			
and Transportation	Its Applications	Manufacturing Networks	Manufacturing						
Systems									
			12:00-13:30 TuLuM_Br						
			Bugambilias						
13:30-15:30 TuBT1	12:20 15:20 T::DT2	13:30-15:30 TuBT3	Lunch Break 4	12:20 45:20 TuDT5	42-20 45-20 T-DTC	13:30-15:30 TuBT7			
	13:30-15:30 TuBT2		13:30-15:30 TuBT4	13:30-15:30 TuBT5	13:30-15:30 TuBT6				
Constitucion A Motion and Robot Control	Constitucion B Recent Advances in	Constitucion C Knowledge Representation	Imperio A	Imperio B Planning, Scheduling and	Imperio C Al-Based Methods	Colonia Manufacturing,			
2	Theory and Applications of	and Reasoning for	and Control 3	Coordination 3	Al-based Methods	Maintenance and Supply			
2	Simulation-Based	Autonomous Agents	and Control 3	Coordination 5		Chains			
	Optimization	/ tatoriomodo / tgento				Onamo			
			15:30-15:45 TuCo3 Br						
			Foyer 2nd Floor						
			Coffee Break 6						
15:45-17:45 TuCT1	15:45-17:45 TuCT2	15:45-17:45 TuCT3	15:45-17:45 TuCT4	15:45-17:45 TuCT5	15:45-17:45 TuCT6	15:45-17:45 TuCT7			
Constitucion A	Constitucion B	Constitucion C	Imperio A	Imperio B	Imperio C	Colonia			
Control Architectures and	Collaborative Robots in	Factory Automation	Motion and Path Planning	Intelligent and Flexible	Wearable Robots and Soft	Automation in Life			
Service Robotics	Manufacturing		and Control 4	Manufacturing 2	Manipulation	Sciences and Human-In-			
						The-Loop			
			19:00-21:00 TuFM_Br						
			Salon Angel						
			Farewell Reception						

Events

Lunch with Leaders

This Free luncheon is open to student and young professional attendees offering the chance to meet and interact with Leaders of RAS and/or Industry. Informal discussion over lunch will take place round table style, topics may vary from career advice, insights into field future, to general conversation to get to know Leaders in the field of automation science and engineering.

Leaders:

- Frank Park, Seoul National University, Korea, and President IEEE RAS
- Peter Luh, Trustees Distinguished Professor, University of Connecticut, USA
- Yu Sun, Professor of University of Toronto, Canada, EiC of IEEE TASE
- Mariagrazia Dotoli, Professor of Politecnico di Bari, Italy

Time: Sunday, 21 August, 12:00 - 13:30

Location: Salon Bugambilias

Women in Engineering Luncheon

This event will stimulate active discussion of the benefits of diversity and inclusion. In addition, we hope it will encourage networking among conference participants that will lead to new and varied collaborations for increased community engagement.

RAS WIE provides the opportunity to foster discussion on the role of women in robotics and automation, inspire girls and promote collaborations and initiatives to advance women in leadership. The goal for this event is to be more than a luncheon for women, but a luncheon with women, a diverse audience is encouraged. Therefore, men are more than welcome to participate and enjoy the discussion. (Lunch with a 30-minute panel discussion followed by networking)

Title: The Benefits of "Diversity" in Research Teams

Organizers: Lisset Salinas, Caleb Rascón, Wendy Aguilar, Oscar Carbajal **Invited Speakers:**

- Cristina Verde, Universidad Nacional Autónoma de Mexico, UNAM, Mexico
- Frank Park, Seoul National University, Korea, and President IEEE RAS

Time: Monday, 22 August, 12:00 - 13:30

Location: Imperio A

Job Opportunities in Industry Luncheon

This is a 30-minute online presentation during lunch time. The speakers will present the job opportunities in Industry for graduated students in the areas of software development, ADAS, embedded systems, autonomous vehicles, among others. The jobs are in Mexico and other regions of the world.

Time: Tuesday, 23 August, 13:00 - 13:30

Location: Imperio A

Award Finalists

Best Conference and Application Paper

- [1] Sarkar, Soumyendu; Gundecha, Vineet; Ghorbanpour, Sahand; Shmakov, Alexander; Ramesh Babu, Ashwin; Pichard, Alexandre; cocho, Mathieu, *Skip Training for Multi-Agent Reinforcement Learning Controller for industrial wave energy converters*
- [2] Gilles, Maximilian; Chen, Yuhao; Winter, Tim Robin; Zeng, E Zhixuan; Wong, Alexander, MetaGraspNet: A Large-Scale Benchmark Dataset for Scene-Aware Ambidextrous Bin Picking via Physics-based Metaverse Synthesis
- [3] Bi, Mingjie; Chen, Gongyu; Tilbury, Dawn; Shen, Siqian; Barton, Kira, *A Model-based Multi-agent Framework to Enable an Agile Response to Supply Chain Disruptions*
- [4] Presten, Mark; Parikh, Rishi; Aeron, Shrey; Mukherjee, Sandeep; Adebola, Simeon Oluwafunmilore; Sharma, Satvik; Theis, Mark; Teitelbaum, Walter; Goldberg, Ken, *Automated Pruning of Polyculture Plants*
- [5] Li, Zhihao; Xu, Wenjun; Liu, Jiayi; Cui, Jia; Hu, Yang, *Digital Twin-based Virtual Reconfiguration Method for Mixed-model Robotic Assembly Line*
- [6] Suemitsu, Issei; Bhamgara, Hanoz; Utsugi, Kei; Hashizume, Jiro; Ito, Kiyoto, *Fast Simulation-based Order Sequence Optimization Assisted by Pre-trained Bayesian Recurrent Neural Network*

Best Student Paper

- [1] <u>PremRaj Kala</u>, Ashish Kumar, Vipul Sanap, Laxmidhar Behera, *Towards Object Agnostic and Robust 4-DoF Table-Top Grasping*
- [2] Xiaomeng Peng, Xiaoning Jin, Duan shiming, Chaitanya Sankavaram, Robust Physics Guided Data-Driven Fleet Battery Pack Fault Detection under Dynamic Operating Conditions
- [3] <u>Lawrence Yunliang Chen</u>, Huang Huang, Michael Danielczuk, Jeffrey Ichnowski, Ken Goldberg, Optimal Shelf Arrangement to Minimize Robot Retrieval Time
- [4] <u>Jiaxu Song</u>, Juan Wu, Kaiyan Yu, *3D Pose Identification of Moving Micro and Nanowires in Fluid Suspensions under Bright-Field Microscopy*
- [5] <u>Jiaqi Jiang</u>, Guanqun Cao, Thanh-Toan Do, Shan Luo, *A4T: Hierarchical Affordance Detection for Transparent Objects Depth Reconstruction and Manipulation*

Best Healthcare Automation Paper

- [1] Zhou, Siqiong; Pfeiffer, Nicholaus; Islam, Upala; Banerjee, Imon; Patel, Bhavika; Iquebal, Ashif, Generating Counterfactual Explanations for Causal Inference in Breast Cancer Treatment Response
- [2] An, Yu; CHEN, SHANEN; Zhang, Xi, A physiological status diagnosis method using tensor-based regularization
- [3] Chen, Suhao; Wang, Zekai; Yao, Bing; Liu, Tieming, *Prediction of Diabetic Retinopathy Using Longitudinal Electronic Health Records*

Content List

CASE20222 Technical Program for Saturday August 20, 2022

SaWAM1 Workshop 1 (AM) (Workshop Sess	Imperio A	Wang, Ying Wang, Di	Shanghai Jiao Tong University Shanghai Jiao Tong University	
, ,	,	19:40-20:00	SaAC1.	
09:00-12:30 Workshop on Machine Learning for	SaWAM1.1	Multi-Sensor Fusion Based Indoor Mobile Robot Localization		
Lennartson, Bengt	Chalmers University of Technology	Liu, Rui	Harbin Institute of Technology Shenzher	
Luh, Peter	University of Connecticut	Xu, Jun	Harbin Institute of Technology Shenzher	
Fanti, Maria Pia Jia, Qing-Shan	Politecnico Di Bari Tsinghua University	Lou, Yunjiang	Harbin Institute of Technology Shenzhe	
Yi, Jingang Ramirez-Amaro, Karinne	Rutgers University Chalmers University of	Chen, Haoyao	Harbin Institute of Technology Shenzhe	
	Technology	20:00-20:20	SaAC1.	
SaWAM3	Constitucion B		proach for Fault Diagnosis of Elevator	
Workshop 3 (Workshop Session) 09:00-12:30	SaWAM3.1	Liang, TaiWang	Guangdong University o Technolog	
AI for Efficiency and Sustainability in Processes.		Chen, Chong	Guangdong University o Technolog	
Guo, Xiwang Wang, Jiacun	Liaoning Petrochemical University Monmouth University	Wang, Tao	Guangdong University o Technolog	
		Zhang, Ao	Guangdong University o Technolog	
SaWAM4	Constitucion C	Qin, Jian	Cranfield University	
Norkshop 4 (Workshop Session)		20:20-20:40	SaAC1.	
Benchmarking and Optimizing the F Systems for Autonomous Applicatio Buzzatto, Joao Liarokapis, Minas		Relief-F Dai, Jiabin Zhang, Jie Wang, Junliang Wu, Lihui	东华大学 Donghua Universit Donghua Universit Shanghai Institute of Technolog	
SaWBM2	Constitucion C	20:40-21:00	SaAC1.	
Workshop 2 (Workshop Session)			k with Equal-Resolution Enhancement	
14:00-17:00	SaWBM2.1	and Gradual Attention of Featur	res for Tiny Target Detection	
Machine Learning for Additive Manu	• ,	Cheng, Mingyang	Donghua Universit Donghua Universit	
Huang, Qiang	University of Southern California	Wang, Junliang Zhou, Yaqin	DongHua University	
Pan, Zengxi	University of Wollongong	Xu, Chuqiao	Shanghai Jiao Tong Universit	
Zhang, Yuming	University of Kentucky	Liu, Ying	Cardiff University	
		Zhang, Jie	Donghua Universit	
SaAC1	Aries 1 & 2	Zitariy, ole	Donghaa Oniversity	
Automation for Data Analytics (C	Donghua University	SaAC2	Aries 3	
Chair: Wang, Junliang Co-Chair: Xu, Jun	Harbin Institute of Technology, Shenzhen	Automation for Manufacturin (Regular Session)	g and Logistics 1 (Chengdu)	
10.00 10.20		Chair: Zhao, Lei	Tsinghua University	
19:00-19:20 Bridging Scenarios in Reinforcemer		Co-Chair: Wei, Junhu	Xi'an Jiaotong University	
Generated Relaying Predictive Mod		19:00-19:20	SaAC2.	
Li, Kuo Jia, Qing-Shan	Tsinghua University Tsinghua University	Trajectory	anning Method for Multi-Robot Optimal	
		Zhang, Chen	Shandong University	
19:20-19:40	SaAC1.2	Li, Yibin	Shandong University	
A Data Fusion-Based LSTM Networ		Zhou, Lelai	Shandong Universit	

19:20-19:40	SaAC2.2	19:00-19:20	SaAC3.1
Collaboration Environment	n Making Method in Human-Robot	Clear Containers in Automated C	
Zhang, Rong	Donghua University	Zhu, Jiyue	Shanghai Jiaotong University
Li, Xinyu	Donghua University	Lee, Wei Lian William	Shanghai Jiaotong University
Zheng, Yu	Shanghai Jiao Tong University	Qin, Wei	Shanghai Jiao Tong University
Lv, Jianhao	Donghua University	19:20-19:40	SaAC3.2
Li, Jie	Donghua University		zation of Equipment in Multimodal
Zheng, Pai	The Hong Kong Polytechnic University	Vessel" and "train-Vessel", pp. 8	
Bao, Jinsong	College of Mechanical Engineering, Donghua University	Li, Wenfeng	Wuhan University of Technology
10.10.00.00	<u> </u>	Wu, Ziteng	Wuhan University of Technology
19:40-20:00	SaAC2.3	Yang, Pengfei	Wuhan University of Technology
An Efficient Approach for Solving Considering Spatial Constraint	g Robotic Task Sequencing Problems	Cai, Lei	Wuhan University of Technology
Li, Donghui	Institute of Automation, Chinese	19:40-20:00	SaAC3.3
Wang, Qingbin	Academy of Sciences, University Institute of Automation, Chinese	Data-Centric Workshop Digital T and Application	win Conceptual Modeling Method
vvang, emgom	Academy of Sciences	Jiqi, Li	Donghua University
Zou, Wei	Chinese Academy of Sciences,	Guohua, Liu	Donghua University
	University of Chinese Academy of	20:00-20:20	SaAC3.4
Su, Hu	Sci Institute of Automation, Chinese Academy of Science	Digital Twin Based Scheduling N Transportation Vehicles	Method for Marine Equipment Material
Wang, Xingang	Research Center of Precision	Shen, Xingwang	Donghua University
Wally, Alligally	Sensing and Control, Institute of A	Liu, Shimin	Donghua University
Xu, Xinyi	Chinese Ordnance Navigation and	Zhou, Bin	Donghua University
, , ,	Control Technology Research Insi	Zheng, Yu	Shanghai Jiao Tong University
20:00-20:20	SaAC2.4	Bao, Jinsong	College of Mechanical
Leader-Follower Based Two-AG	V Cooperative Transportation	-	Engineering, Donghua University
System in 5G Environment	,	20:20-20:40	SaAC3.5
Fu, Xuke	Xi'an Jiaotong Universtiy		amic Duct Static Pressure Method in
Wang, Deming	Xi'an Jiaotong University	Multi-Zone Variable Air Volume S	
Hu, Jianchen	Xi'an Jiaotong University	Wang, Xuetao	Tsinghua University
Wei, Junhu	Xi'an Jiaotong University	Zhao, Qianchuan	Tsinghua University
Yan, Chao-Bo	Xi'an Jiaotong University	Wang, Yifan Yan, Hu	Tsinghua University Tsinghua University
20:20-20:40	SaAC2.5		<u> </u>
Multi-Product Multi-Warehouse L Constraints	Delivery Problem under Inventory	20:40-21:00 A Computing Budget Allocation I	SaAC3.6 Method for Minimizing EV Charging
Cao, Tirui	Tsinghua University	Cost Using Uncertain Wind Powe	
Luo, Xue	Tsinghua University	Jiang, Zhaoyu	Tsinghua University
Wang, Chen	Tsinghua University	Jia, Qing-Shan	Tsinghua University
Wan, Yilei	Alibaba Group	Guan, Xiaohong	Xi'an Jiaotong University
Zhao, Lei	Tsinghua University		
20:40-21:00	SaAC2.6	SaBC1	Aries 1& 2
Stage Automobile Engine Flow S	rkstation Reconfiguration for Multi- Shop Considering Performance	Human-Robot Collaboration for Manufacturing (Chengdu) (Spe	or Futuristic Human-Centric Smart
Deterioration	.	Chair: Zheng, Pai	The Hong Kong Polytechnic
Yang, Miao	Chongqing University	0 01 1 01 - 1	University
Li, Congbo	Chongqing University	Co-Chair: Qiao, Fei	Tongji University
Wu, Wei	University of Hong Kong	Organizer: Zheng, Pai	The Hong Kong Polytechnic University
Zhang, You	Changeing Changes Automobile	Organizer: Bao, Jinsong	DongHua University
Chang, Yongsheng	Chongqing Changan Automobile Co., Ltd	Organizer: Peng, Tao	Zhejiang University
SaAC3	Taurus	Organizer: Xu, Wenjun	Wuhan University of Technology
Foundations of Automation 1 (Organizer: Liu, Yongkui	Xidian University
Chair: Zhao, Qianchuan	Tsinghua University	Organizer: Wang, Xi Vincent	KTH Royal Institute of Technology
Co-Chair: Qin, Wei	Shanghai Jiao Tong University	Organizer: Liu, Ying	Cardiff University
3.2 2 3 ,	g oldo .olig olimololiy	Organizer: Wang, Lihui	KTH Royal Institute of Technology
		Organizer: Wang, Lihui	KTH Royal Institute of Techn

		Organizer: Tang, Lixin	Northeastern University
21:15-21:35	SaBC1.1	21:15-21:35	SaBC2.1
A Meta-Reinforcement Learni Human-Robot Collaboration in	ing-Based Adaptive Robot Control for n Personalized Production	An Efficient Heuristic Algorith Problem with Due Windows	m for Flexible Job-Shop Scheduling
Kwok, Hin Chi	The Hong Kong Polytechnic	Ai, Yi	Xi'an Jiaotong University
	University	Wang, MengYing	Xi'an Jiaotong University
Li, Chengxi	The Hong Kong Polytechnic University	Xue, Xiaoguang	Beijing Special Engineering and Design Institute
Pang, YatMing	The Hong Kong Polytechnic University	Yan, Chao-Bo	Xi'an Jiaotong University
Zheng, Pai	The Hong Kong Polytechnic	21:35-21:55	SaBC2.2
	University	Diversity Guided Production I. Manufacturers	nventory Control in Automobile
21:35-21:55	SaBC1.2	Tao, Lue	Northeastern University
	Human-Robot Collaborative Workshop	Chen, Weihua	BMW Brilliance Automotive Ltd
Based on Online Biotic Fatigu		Wang, Gongshu	Northeastern University
Li, Xinyu	Wuhan University of Technology	Su, Lijie	Northeastern University
Xu, Wenjun	Wuhan University of Technology	Yang, Yang	Northeastern University
Yao, Bitao	Wuhan University of Technology	Dong, Yun	Liaoning Engineering Laboratory
Ji, Zhenrui	Wuhan University of Technology	Bong, run	of Data Analytics and Optimizati
Liu, Xuedong	School of Information Engineering, Wuhan University of Technolog	21:55-22:15	SaBC2.3
21:55-22:15	SaBC1.3	Balancing Production Capacit Demands of Downstream Pro	ty of Steelmaking by Considering the
	ng Based on Spiking Neuron Network to	Wang, Gongshu	Northeastern University
Facilitate Human-Robot Colla	-	Liu, Sibo	Northeastern University
Feng, Siqi	Wuhan University of Technology	Lin, Yujun	Data Analytics and Optimization
Xu, Wenjun	Wuhan University of Technology	· · · · · · · · · · · · · · · · · · ·	
Yao, Bitao	Wuhan University of Technology	22:15-22:35	SaBC2.4
Liu, Zhihao	Wuhan University of Technology	Capacitated Lot Sizing Proble Downstream Processes-Base	em with Family-Based Setup and
Ji, Zhenrui	Wuhan University of Technology		Frontier Science Center for
22:15-22:35	SaBC1.4 re Decision-Making Method Based on	Zhao, Yuming	Industrial Intelligence and Systems
Confidence for Smart Worksh		Wang, Gongshu	Northeastern University
Wang, Dongyuan	Tongji University	Yang, Yang	Northeastern University
Qiao, Fei	Tongji University	Su, Lijie	Northeastern University
Guan, Liuen	Tongji University		·
Liu, Juan	Tongji University	22:35-22:55	SaBC2.5
Ding, Chen	Tongji University	Modeling, Analysis, and Impro Manufacturing Systems: A Sy	
22:35-22:55	SaBC1.5	Liu, Lingchen	Xi'an Jiaotong University
Point Cloud Extraction of Airc	raft Skin Butt Joint Based on Adaptive	Yan, Chao-Bo	Xi'an Jiaotong University
Matching Calibration Algorithm	n	Li, Jingshan	Tsinghua University
Wen, Zhihui	Nanchang Hangkong University	22:55-23:15	SaBC2.6
Xia, Guisuo	Nanchang Hangkong University		d Bound Algorithm for Scheduling of
Liu, Fang	Nanchang Hangkong University	Deadlock-Prone Flexible Man	
Wei, Mengjun	Nanchang Hangkong University	Yin, Pei	Northwestern Polytechnical
He, Yizhen	Nanchang Hangkong University	,	University
Chen, Feng	Nanchang Hangkong University	Luo, JianChao	Research & Development Institute
Liu, Wandong	Nanchang Hangkong University		of Northwestern Polytechnical U
		Zhou, MengChu	New Jersey Institute of Technology
SaBC2	Aries 3 ation for Manufacture-Circulation		
Industrial System (Chengdu		SaBC3	Taurus
Chair: Wang, Gongshu	Northeastern University	Machine Learning and Als f and Enhancement (Chengd	or Quality & Reliability Assessment
Co-Chair: Yang, Yang	Institute of Industrial and Systems Enginnering, Northeastern	Chair: Zhang, Xi	College of Engineering, Peking
	University		University

Northeastern University

Northeastern University

Northeastern University

Organizer: Wang, Gongshu

Organizer: Yang, Yang

Organizer: Su, Lijie

Co-Chair: Qin, Wei

Organizer: Zhang, Xi

University

Shanghai Jiao Tong University

College of Engineering, Peking

Organizer: Liu, Yu	University of Electronic Science and Technology of China
21:15-21:35	SaBC3.1
Double-Robust Bayesian Process Symmetric Errors	Optimization with Spherically
Ouyang, Linhan	Nanjing University of Aeronautics and Astronautics
21:35-21:55	SaBC3.2
Classification Based Hard Disk Dri Methodologies, Performance Evalu	
Xu, Ruiyu	Peking University
Wang, Xinming	Peking University
Wu, Jianguo	Peking University

High-Dimensional Categorical Process Monitoring Via Multiscale Pattern Mining and Testing

21:55-22:15

Wang, Kai Xi'an Jiaotong University

22:15-22:35	SaBC3.4
Maintenance Optimization o Reinforcement Learning	f Multicomponent Systems Using
Zhou, Yifan	Southeast University
Li, Bangcheng	Southeast University
22:35-22:55	SaBC3.
Causality-Based Prediction System	Method for the Diesel Engine Assembly
Hu, Jinhua	Shanghai JiaoTong Universit
Sun, Yanning	Shanghai Jiao Tong Universit
Xu, Hongwei	Shanghai Jiao Tong Universit
Zhang, Zhanluo	Shanghai Jiao Tong Universit
Qin, Wei	Shanghai Jiao Tong Universit
Li, Xinyu	Huazhong University of Scienc and Technolog
22:55-23:15	SaBC3.

Constraint Linear Model for Period Estimation and Sparse Feature Extraction Based on Iterative Likelihood Ratio Test

Li, Yongxiang Shanghai Jiao Tong University

CASE2022 Technical Program for Sunday August 21, 2022

SuWCC2	Aries 1 & 2	
Workshop 5 (Chengdu) (Workshop Session)		
01:00-04:00	SuWCC2.1	
Semiconductor Smart Manufactur	ing Technology Workshop	
Qiao, Yan	Macau University of Science and Technology	
Liu, Bin	IKAS Industries (Guangdong) Company, Ltd	
SuWCC3	Aries 3	
Workshop 6 (Chengdu) (Worksh	op Session)	
01:00-04:00	SuWCC3.1	
Robot Teams: Challenges, Model	s, and Methodologies.	
Haibin, Zhu	Nipissing University	
Zhang, Junqi	Tongji Univ	
SuP1L	Salon Fiestas	
Plenary I (Plenary Session)		
Chair: Li, Xiaoou	Center of Research and Advanced Studies of NationalPolytechnic Institute (CINVESTAV-IPN)	
08:00-09:00	SuP1L.1	
Robotic Manipulation: Sense, Touch, and Learn.		
Wang, Michael Yu	Hong Kong University of Science & Technology	
SulP	Salon Fiestas	
Special Panel (Plenary Session)		
Chair: Lennartson, Bengt	Chalmers University of Technology	

Panel Discussion on Machine Lo	•	
Lennartson, Bengt	Chalmers University of Technology	
	r comining	
SuBCAP	Salon Fiesta	
Best Conference and Applicat (Special Session)	ion Paper Awards Session	
Chair: Luh, Peter	University of Connecticu	
10:15-10:35	SuBCAP.	
Skip Training for Multi-Agent Re Industrial Wave Energy Convert	einforcement Learning Controller for ters	
Sarkar, Soumyendu	Hewlett Packard Enterpris	
Gundecha, Vineet	Hewlett Packard Enterpris	
Ghorbanpour, Sahand	Hewlett Packard Enterpris	
Shmakov, Alexander	HPE Lab	
Ramesh Babu, Ashwin	Hewlett Packard Enterprise Lab	
Pichard, Alexandre	Carnegie Clean Energ	
Cocho, Mathieu	Carnegie Clean Energ	
10:35-10:55	SuBCAP.	
	Benchmark Dataset for Scene-Aware hysics-Based Metaverse Synthesis	
Gilles, Maximilian	Karlsruhe Institute of Technolog	
Chen, Yuhao	University of Waterlo	
Winter, Tim Robin	Karlsruhe Institute of Technolog	
Zeng, E Zhixuan	University of Waterlo	
Wong, Alexander	University of Waterlo	
10:55-11:15	SuBCAP	
Digital Twin-Based Virtual Reco Robotic Assembly Line	nfiguration Method for Mixed-Model	

SuIP.1

Li, Zhihao	Wuhan University of Technology	Clemon, Lee	University of Technology Sydne
Xu, Wenjun	Wuhan University of Technology	Fitch, Robert	University of Technology Sydne
Liu, Jiayi	Wuhan University of Technology	Mettu, Ramgopal	Tulane Universi
Cui, Jia	Wuhan University of Technology,	14:30-14:50	SuAM1.
Hu, Yang	School of Information Engi China Ship Development and	Investigating Statistical Correlati Monitoring Data for Powder Bed	ion between Multi-Modality In-Situ
, 3	Design Center	Yang, Zhuo	Georgetown Universit
11:15-11:35	SuBCAP.4	Adnan, Muhammad	National Cheng Kung University Institute of Manufacturing Info
A Model-Based Multi-Agent Fram to Supply Chain Disruptions	ework to Enable an Agile Response	Lu, Yan	National Institute of Technolog
Bi, Mingjie	University of Michigan	Chang Fan Tian	and Standard
Chen, Gongyu	University of Michigan, Ann Arbor	Cheng, Fan-Tien Yang, Haw-Ching	National Kashajung Universi
Tilbury, Dawn	University of Michigan	rang, naw-ching	National Kaohsiung Univ. of So and Teo
Shen, Siqian	University of Michigan	Perisic, Milica	NIS
Barton, Kira	University of Michigan at Ann	Ndiaye, Yande	NIS
	Arbor	14:50-15:10	SuAM1.
11:35-11:55	SuBCAP.5		elt-Pool Variations in Metal-Based
Automated Pruning of Polyculture		Additive Manufacturing	
Presten, Mark	University of California, Berkeley	Yang, Hui	The Pennsylvania State Universi
Parikh, Rishi	University of California Berkeley	Zhang, Siqi	Pennsylvania State Universi
Aeron, Shrey	University of California, Berkeley	Lu, Yan	National Institute of Technolog
Mukherjee, Sandeep	University of California, Berkeley		and Standard
Adebola, Simeon Oluwafunmilore	University of California, Berkeley	Witherell, Paul	NIS
Sharma, Satvik	University of California, Berkeley	Kumara, Soundar	The Pennsylvania State Universi
Theis, Mark	University of California	15:10-15:30	SuAM1.
Teitelbaum, Walter	UC Santa Cruz		trol of a Redundant Robotic Wire Arc
Goldberg, Ken	UC Berkeley	Additive Manufacturing System	
		Lizarralde, Nicolas	Federal University of Rio D Janeir
11:55-12:15 Fast Simulation-Based Order Sec	SuBCAP.6	Coutinho, Fernando	Federal University of Rio D
Pre-Trained Bayesian Recurrent			Janeir
Suemitsu, Issei	Hitachi, Ltd	Lizarralde, Fernando	Federal University of Rio D
Bhamgara, Hanoz	Hitachi Ltd		Janei
Utsugi, Kei	Hitachi Ltd	O. AMO	0 414
Hashizume, Jiro	Hitachi, Ltd	SuAM2	Constitucion
Ito, Kiyoto	Research and Development	Session)	stems and Industry 4.0 1 (Regular
	Group, Hitachi, Ltd	Chair: Ju, Feng	Arizona State Universi
SuAM1	Constitucion A	Co-Chair: Kovalenko, Ilya	Pennsylvania State Universi
Additive Manufacturing (Regula		13:30-13:50	SuAM2.
Chair: Huang, Qiang	University of Southern California	Decentralized Factory Control B	ased on Multi-Agent Technologies
Co-Chair: Mettu, Ramgopal	Tulane University	Bidmead, Jonathan	University of Aucklan
13:30-13:50	SuAM1.1	Bhatiani, Sahil	University of Aucklan
A Deep-Learning-Based Surrogat		Xu, Xun	University of Aucklan
Prediction in Laser Metal Deposit		13:50-14:10	SuAM2.
Guo, Shenghan	Arizona State University		weight Industry 4.0 Architecture for
Guo, Weihong	Rutgers University	Cyber-Physical Production Syste	
Bian, Linkan	Mississippi State University	Luensch, Dennis	Fraunhofer Institute for Materia
Guo, Yuebin	Rutgers University		Flow and Logistic
13:50-14:10	SuAM1.2	Detzner, Peter	Fraunhofer Institute for Materi Flow and Logistic
Small-Sample Learning of 3D Prin Printing Primitives	nted Thin-Wall Structures Using	Ebner, Andreas	Fraunhofer-Institut Für Optroni Systemtechnik Und Bildauswer
Wang, Yuanxiang	University of Southern California	Kerner, Sören	Fraunhofer Institute for Materia
Huana Olama	University of Southern California		Flow and Logistic
Huang, Qiang	•		

Ji, Fan	Technical University of Munich	Fang, Cheng	Texas A&M University
Ocker, Felix	Technical University of Munich	Zou, Jun	Texas A&M University
Zou, Minjie	Technical University of Munich	Song, Dezhen	Texas A&M University
Vogel-Heuser, Birgit	Technical University Munich	13:50-14:10	SuAM3.2
Oligschläger, Marius	SMS Group GmbH		n Method for Laser Profile Scanners in
14:30-14:50	SuAM2.4	High Precision Applications U.	
A Novel Implementation Framewo	ork of Digital Twins for Intelligent	Paschke, Udo	Fraunhofer IPA
Manufacturing Based on Containe	er Technology and Cloud	Landgraf, Christian	Fraunhofer IPA
Manufacturing Services		Ernst, Kilian	Fraunhofer IPA
Hung, Min-Hsiung	Chinese Culture University	Stoll, Johannes T.	Fraunhofer Institute for
Lin, Yu-Chuan	National Cheng Kung University		Manufacturing Engineering and Automatic
Hsiao, Hung-Chang	National Cheng Kung University	Kraus, Werner	Fraunhofer IPA
Chen, Chao-Chun	National Cheng Kung University	· · · · · · · · · · · · · · · · · · ·	
Lai, Kuan-Chou	Department of Computer Science and Information Engineering, Nati	14:10-14:30 Estimating the Center of Mass	SuAM3.3 s of an Unknown Object Via Dynamic
Hsieh, Yu-Ming	National Cheng Kung University, Institute of Manufacturing Infor	Pushing Gao, Ziyan	Japan Advanced Institute of
Hao, Tieng	National Cheng Kung University	Gao, Ziyan	Science and Technology
Tsai, Tsung-Han	National Cheng Kung University	Elibol, Armagan	Japan Advanced Institute of
Huang, Hsien-Cheng	National Cheng Kung University		Science and Technology
Yang, Haw-Ching	National Kaohsiung Univ. of Sci. and Tech	Chong, Nak Young	Japan Advanced Institute of Science and Technology
Cheng, Fan-Tien	National Cheng Kung University	14:30-14:50	SuAM3.4
14:50-15:10	SuAM2.5	Shape Estimation of a 3D Prin	nted Soft Sensor Using Multi-Hypothesis
An Integrated Framework for Dyn Obtain New Line Configurations	amic Manufacturing Planning to	Tan, Kaige	KTH Royal Institute of Technology
Poudel, Laxmi	University of Michigan	Ji, Qinglei	KTH Royal Institute of Technology
Kovalenko, Ilya	Pennsylvania State University	Feng, Lei	KTH Royal Institute of Technology
Geng, Ruijie	University of Michigan	Torngren, Martin	KTH Royal Institute of Technology
Matsui, Takaharu	Hitachi America, Ltd	14:50-15:10	SuAM3.5
Nonaka, Youichi	Hitachi		me Quality Assessment for Mobile
Nakano, Takahiro	HITACHI	Robot with Omnidirectional Vis	
Umeda, Shota	Hitachi, Ltd	Karpyshev, Pavel	Skolkovo Institute of Science and
Tilbury, Dawn	University of Michigan		Technology
Barton, Kira	University of Michigan at Ann	Kruzhkov, Evgeny	Skoltech
•	Arbor	Yudin, Evgeny	Skoltech
45.40.45.00	0.4440.0	Savinykh, Alena	Skolkovo Institute of Science and Technology
15:10-15:30	SuAM2.6	Potapov, Andrei	Skolkovo Institute of Science and
A Communication Architecture to Efficiency in Automated Production			Technology
Wilch, Jan	Technical University of Munich	Kurenkov, Mikhail	Skolkovo Institute of Science and Technology
Vogel-Heuser, Birgit	Technical University Munich	Kolomeytsev, Anton	Skolkovo Institute of Science and
Hsieh, Yu-Ming	National Cheng Kung University, Institute of Manufacturing Infor	Kalinov, Ivan	Technology Skolkovo Institute of Science and
Cheng, Fan-Tien	National Cheng Kung University	,	Technology
SuAM3	Constitucion C	Tsetserukou, Dzmitry	Skolkovo Institute of Science and Technology
Estimation and Calibration (Reg		15:10-15:30	SuAM3.6
Chair: Song, Dezhen	Texas A&M University	A Kevpoint-Based Object Rep	resentation for Generating Task-
Co-Chair: Sridharan, Mohan	University of Birmingham	Specific Grasps	3
		Robson, Mark	University of Birmingham
		Sridharan, Mohan	University of Birmingham
13:30-13:50	SuAM3.1	SuAM4	Imperio A
Fingertip-Mounted Dual-Modal an		(Regular Session)	ecturing and Transportation 1
(DMDSM)-Based Pretouch Senso	, ,	Chair: Zhang, Yuming	University of Kentucky
Wang Di	Tevas A&M I Iniversity	Co Chair VII Man	CINIVECTAV/ IDNI

Texas A&M University

Texas A&M University

Co-Chair: Yu, Wen

Wang, Di

Guo, Fengzhi

CINVESTAV-IPN

13:30-13:50	SuAM4.1	14:10-14:30	SuAM5.3
In-Hand Pose Estimation and Pin Hole Components	Inspection for Insertion of Through-	Heterogeneous Multi-Robot Tas Mass Customization	k Scheduling Heuristics for Garment
Hagelskjær, Frederik	University of Southern Denmark	Bezerra, Ranulfo	Tohoku Universit
Kraft, Dirk	University of Southern Denmark	Ohno, Kazunori	Tohoku Universit
13:50-14:10	SuAM4.2	Kojima, Shotaro	Tohoku Universit
SingleDemoGrasp: Learning to G	rasp from a Single Image	Aryadi, Hanif	Tohoku Universit
Demonstration	3 - 13	Gunji, Kenta	Tohoku Universit
Mehman Sefat, Amir	Tampere University	Kuwahara, Masao	Tohoku Universit
Angleraud, Alexandre	Tampere University	Okada, Yoshito	Tohoku Universit
Rahtu, Esa	University of Oulu	Konyo, Masashi	Tohoku Universit
Pieters, Roel S.	Tampere University	Tadokoro, Satoshi	Tohoku Universit
14:10-14:30	SuAM4.3	14:30-14:50	SuAM5.
Analysis of Paint Film Thickness L		Load-Haul Cycle Segmentation	with Hidden Semi-Markov Models
Method Considering Time Series	Change of Flow	Markham, Georgia	The University of Sydne
Takahashi, Yoshinobu	Waseda University	Seiler, Konstantin M	The University of Sydne
Chang, Fangshou	Waseda University	Balamurali, Mehala	University of Syde
Kato, Fumihiro	Waseda University	Hill, Andrew John	University of Sydne
Iwata, Hiroyasu	Waseda University	14:50-15:10	SuAM5.
14:30-14:50	SuAM4.4	A Low-Complexity and High-Per Strategy of a Hybrid Electric Vel	
Self-Supervised Deep Visual Serv	voing for High Precision Peg-In-Hole	Liu, Tong	KTH Royal Institute of Technolog
Insertion		Zhu, Wenyao	KTH Royal Institute of Technolog
Haugaard, Rasmus Laurvig	University of Southern Denmark	Tan, Kaige	KTH Royal Institute of Technolog
Buch, Anders Glent	University of Southern Denmark	Liu, Mingwei	KTH Royal Institute of Technolog
Iversen, Thorbjørn Mosekjær	The Maersk Mc-Kinney Moller	Feng, Lei	KTH Royal Institute of Technolog
	Institute, University of Southern De	15:10-15:30	SuAM5.
14:50-15:10	SuAM4.5		ic Micro-Dose Herbicide Spray for
Contrastive Learning of Features	,	Precision Weed Management	
Jiang, Peng	Texas A&M University	Hu, Chengsong	Texas A&M Universit
Saripalli, Srikanth	Texas A&M	Xie, Shuangyu	Texas A&M Universit
		Song, Dezhen	Texas A&M Universit
15:10-15:30	SuAM4.6	Thomasson, J. Alex	Mississippi State Universit
How to Accurately Monitor the We Pool Serial Images Using CNN-LS	eld Penetration from Dynamic Weld STM Deep Learning Model?	Hardin IV, Robert G.	Texas A&M Universit ar Texas A&M Universit
Yu, Rui	University of Kentucky	Bagavathiannan, Muthukuma	ai Texas Adıvi Offiversit
Kershaw, Joseph	Case Western Reserve University	SuAM6	Imperio (
Wang, Peng (Edward)	University of Kentucky	Agricultural Automation 1 (Re	•
Zhang, Yuming	University of Kentucky	Chair: Meng, Xiangyu	Louisiana State Universit
		Co-Chair: Han, Feng	Rutgers Universit
SuAM5	Imperio B	13:30-13:50	SuAM6.
Planning, Scheduling and Coord	dination 1 (Regular Session)	Fruit Mapping with Shape Comp	
Chair: Julius, Agung	Rensselaer Polytechnic Institute	Monitoring	netion for Autonomous Crop
Co-Chair: Yu, Wen	CINVESTAV-IPN	Marangoz, Salih	University of Bon
13:30-13:50	SuAM5.1	Zaenker, Tobias	University of Bon
Path Planning for 3-D In-Hand De		Menon, Rohit	University of Bon
Presence of Adhesion Forces		Bennewitz, Maren	University of Bon
Tchouatat Kepseu, Ivan	Universite Bourgogne Franche- Comte	,	,
Gauthier, Michael	FEMTO-ST Institute	13:50-14:10	SuAM6.
Dahmouche, Redwan	Université De Franche Comté	13:50-14:10 Position-Agnostic Autonomous I	Navigation in Vineyards with Deep
13:50-14:10	SuAM5.2	Reinforcement Learning	vavigation in vincyards with Deep
Distributed Consensus-Based On		Martini, Mauro	Politecnico Di Torine
with Temporal Logic Specification		Cerrato, Simone	Politecnico Di Torin
Yan, Ruixuan	Rensselaer Polytechnic Institute	Salvetti, Francesco	Politecnico Di Torino
Julius, Agung	Rensselaer Polytechnic Institute	Angarano, Simone	Politecnico Di Torino

Chiaberge, Marcello	Politecnico Di Torino		UPIB
14:10-14:30	SuAM6.3	Cruz-Ortiz, David	National Polytechnique Institute UPIB
Eco-Driving of Autonomous Volume Signalized Intersections	ehicles for Non-Stop Crossing of	Chairez, Isaac	UPIBI-IPI
Meng, Xiangyu	Louisiana State University	14:50-15:10	SuAM7.5
Cassandras, Christos G.	Boston University	9,	ezvous Planning Approach for Multi-
14:30-14:50	SuAM6.4	Vehicle Teams	Tarana A O NA I I la incorreita
Produce Harvesting by Laser	Stem-Cutting	Chour, Kenny	Texas A&M University
Sorour, Mohamed	Norwegian University of Life Sciences NMBU	Reddinger, Jean-Paul	DEVCOM Army Research Laboratory
From, Pål Johan	Norwegian University of Life Sciences	Dotterweich, James Childers, Marshal	Engility Corp DEVCOM Army Research
Elgeneidy, Khaled	University of Lincoln		Laborator
Kanarachos, Stratis	Frederick University	Humann, James	DEVCOM Army Research
Sallam, Mohamed	Helwan University	Rathinam, Sivakumar	Laboratory TAMU
14:50-15:10	SuAM6.5	Darbha, Swaroop	TAMU
	e Movement Primitives for Object	Baisha, Gwaroop	TAME
Reaching in Clutter	e Movement i illilliuves for Object	SuBM1	Constitucion A
Mghames, Sariah	University of Lincoln	Autonomous Vehicle Navigation	on (Regular Session)
Hanheide, Marc	University of Lincoln	Chair: Song, Dezhen	Texas A&M University
15:10-15:30	SuAM6.6	Co-Chair: Incremona, Gian	Politecnico Di Milano
	oad Switch of Unmanned Aerial	Paolo	
Vehicles on a Single Automati		15:45-16:05	SuBM1.1
Ausonio, Elena	University of Genoa	Scan Matching and Probabilistic Airport Environment	Stationary Global Localization in an
Bagnerini, Patrizia	University of Genoa	Hoj, Henning Si	Technical University of Denmarl
Gaggero, Mauro	National Research Council of Italy	Christensen, Henrik Iskov	UC San Diego
		Hansen, Søren	Automation and Control Group
SuAM7	Colonia	, ,	Department of Electrical Engineer
Automation at Micro-Nano S	Scales 1 (Regular Session)	Svanebjerg, Elo	Vestergaard Company
Chair: Zefran, Milos	University of Illinois at Chicago	16:05-16:25	0.0144
		10.00-10.20	SuBM1.2
Co-Chair: Yu, Kaiyan	Binghamton University	Priority Tracking of Pedestrians t	
Co-Chair: Yu, Kaiyan 13:30-13:50	,		for Self-Driving Cars
13:30-13:50	Binghamton University SuAM7.1	Priority Tracking of Pedestrians t	for Self-Driving Cars Cornell University
13:30-13:50	Binghamton University SuAM7.1	Priority Tracking of Pedestrians to Nino, Jose	for Self-Driving Cars Cornell University
13:30-13:50 FastPivot: An Algorithm for Inc	SuAM7.1 verse Problems	Priority Tracking of Pedestrians to Nino, Jose	for Self-Driving Cars Cornell University Cornell University
13:30-13:50 FastPivot: An Algorithm for Inv	Binghamton University SuAM7.1 verse Problems University of Southern California	Priority Tracking of Pedestrians for Nino, Jose Campbell, Mark	for Self-Driving Cars Cornell University Cornell University SuBM1.3
13:30-13:50 FastPivot: An Algorithm for Inv. Guan, Yuling Li, Ang	Binghamton University SuAM7.1 verse Problems University of Southern California University of Southern California	Priority Tracking of Pedestrians for Nino, Jose Campbell, Mark	for Self-Driving Cars Cornell University Cornell University SuBM1.3
13:30-13:50 FastPivot: An Algorithm for Inv. Guan, Yuling Li, Ang Koenig, Sven	Binghamton University SuAM7.1 verse Problems University of Southern California University of Southern California University of Southern California	Priority Tracking of Pedestrians to Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor	for Self-Driving Cars Cornell University Cornell University SuBM1.3
13:30-13:50 FastPivot: An Algorithm for Inv. Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan	Binghamton University SuAM7.1 verse Problems University of Southern California University of Southern California University of Southern California University of Southern California	Priority Tracking of Pedestrians to Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization	for Self-Driving Cars Cornell University Cornell University SuBM1.3 nomous Ground Vehicle Via Flatness Politecnico Di Miland
13:30-13:50 FastPivot: An Algorithm for Integration Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio	For Self-Driving Cars Cornell University Cornell University SuBM1.3 Promous Ground Vehicle Via Flatness Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo Micro Agents Using Global Ex	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 vertion Planning for Manipulating Multiple external Electric Fields	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo	For Self-Driving Cars Cornell University Cornell University SuBM1.3 Promous Ground Vehicle Via Flatness Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Momicro Agents Using Global Extensional Extensional Extension	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple sternal Electric Fields Binghamton University	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio	for Self-Driving Cars Cornell University Cornell University SuBM1.3 nomous Ground Vehicle Via Flatness Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo Micro Agents Using Global Ex Li, Xilin Wu, Juan	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple ternal Electric Fields Binghamton University Binghamton University	Priority Tracking of Pedestrians in Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predict	Cornell University Cornell University Cornell University SuBM1.3 Commous Ground Vehicle Via Flatness Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano SuBM1.4 Cutive Control Approach to Vehicle
13:30-13:50 FastPivot: An Algorithm for Integrating Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo Micro Agents Using Global Ex Li, Xilin Wu, Juan Song, Jiaxu	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple ternal Electric Fields Binghamton University Binghamton University	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predict Routing and Control with Platoor	Cornell University Cornell University SuBM1.3 Commous Ground Vehicle Via Flatness Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano SuBM1.4 Ctive Control Approach to Vehicle
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Momero Agents Using Global Extended Sampling Global Extended Global Ex	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple external Electric Fields Binghamton University Binghamton University Binghamton University Binghamton University	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predic Routing and Control with Platoor Giannini, Francesco	Cornell University Cornell University SuBM1.3 Politecnico Di Milano SuBM1.4 Citive Control Approach to Vehicle of Constraints Università Della Calabria
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo Micro Agents Using Global Ex Li, Xilin Wu, Juan Song, Jiaxu Yu, Kaiyan 14:10-14:30	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple sternal Electric Fields Binghamton University	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predic Routing and Control with Platoor Giannini, Francesco Fortino, Giancarlo	Cornell University SuBM1.3 Politecnico Di Milano Constraints Università Della Calabria Università Della Calabria
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Modicro Agents Using Global Exting Xilin Wu, Juan Song, Jiaxu Yu, Kaiyan 14:10-14:30 Group-Based Control of Large	Binghamton University SuAM7.1 Verse Problems University of Southern California SuAM7.2 Intion Planning for Manipulating Multiple Internal Electric Fields Binghamton University	Priority Tracking of Pedestrians in Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predic Routing and Control with Platoor Giannini, Francesco Fortino, Giancarlo Franzè, Giuseppe	Cornell University Cornell University Cornell University SuBM1.3 Politecnico Di Milano SuBM1.4 Citive Control Approach to Vehicle or Constraints Università Della Calabria University of Calabria
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo Micro Agents Using Global Ex Li, Xilin Wu, Juan Song, Jiaxu Yu, Kaiyan 14:10-14:30 Group-Based Control of Large Board Physical Finite-State M	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple sternal Electric Fields Binghamton University Binghamton University Binghamton University Binghamton University Binghamton University SuAM7.3 se-Scale Micro-Robot Swarms with On- fachines	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predict Routing and Control with Platoor Giannini, Francesco Fortino, Giancarlo Franzè, Giuseppe Pupo, Francesco	Cornell University Cornell University Cornell University SuBM1.3 Romous Ground Vehicle Via Flatness Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano SuBM1.4 Ctive Control Approach to Vehicle In Constraints Università Della Calabria University of Calabria Università Della Calabria
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo Micro Agents Using Global Ex Li, Xilin Wu, Juan Song, Jiaxu Yu, Kaiyan 14:10-14:30 Group-Based Control of Large Board Physical Finite-State M Li, Siyu	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple sternal Electric Fields Binghamton University	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predict Routing and Control with Platoor Giannini, Francesco Fortino, Giancarlo Franzè, Giuseppe Pupo, Francesco 17:05-17:25	Cornell University Cornell University SuBM1.3 Comous Ground Vehicle Via Flatness Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano SuBM1.4 Ctive Control Approach to Vehicle or Constraints Università Della Calabria University of Calabria Università Della Calabria Università Della Calabria Università Della Calabria
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo Micro Agents Using Global Ex Li, Xilin Wu, Juan Song, Jiaxu Yu, Kaiyan 14:10-14:30 Group-Based Control of Large Board Physical Finite-State M	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple sternal Electric Fields Binghamton University Binghamton University Binghamton University Binghamton University Binghamton University SuAM7.3 se-Scale Micro-Robot Swarms with On- fachines	Priority Tracking of Pedestrians in Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predict Routing and Control with Platoor Giannini, Francesco Fortino, Giancarlo Franzè, Giuseppe Pupo, Francesco 17:05-17:25 Improving Ego-Velocity Estimation	Cornell University Cornell University Cornell University SuBM1.3 Politecnico Di Milano SuBM1.4 Ctive Control Approach to Vehicle Constraints Università Della Calabria University of Calabria University Della Calabria Università Della Calabria On of a Low-Cost 2D Doppler Radar
13:30-13:50 FastPivot: An Algorithm for Integrating Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo Micro Agents Using Global Ex Li, Xilin Wu, Juan Song, Jiaxu Yu, Kaiyan 14:10-14:30 Group-Based Control of Large Board Physical Finite-State M Li, Siyu Zefran, Milos Paprotny, Igor	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple sternal Electric Fields Binghamton University	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predict Routing and Control with Platoor Giannini, Francesco Fortino, Giancarlo Franzè, Giuseppe Pupo, Francesco 17:05-17:25	Cornell University SuBM1.3 Politecnico Di Milano SuBM1.4 Ctive Control Approach to Vehicle In Constraints Università Della Calabria University of Calabria University of Calabria University Della Calabria Università Della Calabria SuBM1.5 On of a Low-Cost 2D Doppler Radar kground and Elevation Effects
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo Micro Agents Using Global Ex Li, Xilin Wu, Juan Song, Jiaxu Yu, Kaiyan 14:10-14:30 Group-Based Control of Large Board Physical Finite-State M Li, Siyu Zefran, Milos Paprotny, Igor	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 stion Planning for Manipulating Multiple sternal Electric Fields Binghamton University	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predic Routing and Control with Platoor Giannini, Francesco Fortino, Giancarlo Franzè, Giuseppe Pupo, Francesco 17:05-17:25 Improving Ego-Velocity Estimation for Vehicles by Recognizing Back	Cornell University SuBM1.3 Politecnico Di Milano SuBM1.4 Ctive Control Approach to Vehicle In Constraints Università Della Calabria University of Calabria University Della Calabria SuBM1.5 On of a Low-Cost 2D Doppler Radar kground and Elevation Effects Texas A&M University
13:30-13:50 FastPivot: An Algorithm for International Guan, Yuling Li, Ang Koenig, Sven Haas, Stephan Kumar, T. K. Satish 13:50-14:10 Informed Sampling-Based Mo Micro Agents Using Global Ex Li, Xilin Wu, Juan Song, Jiaxu Yu, Kaiyan 14:10-14:30 Group-Based Control of Large Board Physical Finite-State M Li, Siyu Zefran, Milos Paprotny, Igor 14:30-14:50	Binghamton University SuAM7.1 verse Problems University of Southern California SuAM7.2 Ition Planning for Manipulating Multiple Internal Electric Fields Binghamton University	Priority Tracking of Pedestrians of Nino, Jose Campbell, Mark 16:25-16:45 Sliding Mode Control of an Autor Based Feedback Linearization Bascetta, Luca Incremona, Gian Paolo Della Rossa, Fabio Dercole, Fabio 16:45-17:05 A Deep Q Learning-Model Predic Routing and Control with Platoor Giannini, Francesco Fortino, Giancarlo Franzè, Giuseppe Pupo, Francesco 17:05-17:25 Improving Ego-Velocity Estimatic for Vehicles by Recognizing Back Kingery, Aaron	Cornell University Cornell University SuBM1.3 nomous Ground Vehicle Via Flatness Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano Politecnico Di Milano SuBM1.4 ctive Control Approach to Vehicle In Constraints Università Della Calabria University of Calabria Università Della Calabria Università Della Calabria SuBM1.5 SuBM1.5 on of a Low-Cost 2D Doppler Radar

Aviles Mejia, Jorge Eduardo	XLIM Research Institute, UMR CNRS 7252, University of Limoges
Soto Guerrero, Daniel	XLIM Research Institute, UMR CNRS 7252, University of Limoges
Stephant, Joanny	XLIM UMR CNRS 7252 University of Limoges
Labbani-Igbida, Ouiddad	University of Limoges ENSIL Engineering School XLIM Insti

SuBM2	Constitucion B
Computer Vision in Automation	1 (Regular Session)
Chair: Aragon-Camarasa, Gerardo	University of Glasgow
Co-Chair: Negrete, Marco	Faculty of Engineering, UNAM
15:45-16:05	SuBM2.1
HueCode2: An Illumination-Robust	
Fiducial Markers Using Optimal Co	
Yokota, Yoshiki	Tohoku University
Fujikura, Daiki	TOHOKU UNIVERSITY
Okada, Yoshito	Tohoku University
Ohno, Kazunori	Tohoku University
Tadakuma, Kenjiro	Tohoku University
Tadokoro, Satoshi	Tohoku University
16:05-16:25	SuBM2.2
Multiview Object and View Sequent Markov Models	ce Recognition Using Hidden
Nuñez, Lorena	Universidad Nacional Autónoma De México
Negrete, Marco	Faculty of Engineering, UNAM
Savage, Jesus	University of Mexico, UNAM
Contreras-Toledo, Luis Angel	Tamagawa University
Moctezuma Flores, Miguel	Universidad Nacional Autónoma De México
16:25-16:45	SuBM2.3
Synthetic-To-Real Domain Adaptat Translation	ion Using Contrastive Unpaired
Imbusch, Benedikt T.	University of Bonn
Schwarz, Max	University Bonn
Behnke, Sven	University of Bonn
16:45-17:05	SuBM2.4
A Continuous Robot Vision Approa Visually Perceived Weights of Garn	
Duan, Li	University of Glasgow
Aragon-Camarasa, Gerardo	University of Glasgow
17:05-17:25	SuBM2.5
Parameterized B-Rep-Based Surfa Category-Level 3D Object Matching	ce Correspondence Estimation for
Yano, Taiki	Hitachi, Ltd
Hagihara, Daisuke	Hitachi, Ltd
Kimura, Nobutaka	Hitachi, Ltd
Chihara, Nobuhiro	Hitachi, Ltd
Ito, Kiyoto	Research and Development Group, Hitachi, Ltd
17:25-17:45	SuBM2.6
11.20-11.40	Gubiviz.0

Robust Human Identity Anonymization Using Pose Estimation

University of California, San Diego

Zhang, Hengyuan

Human Factors and Human-In-T	ha Loon (Pogular Socian)
Chair: Bebek, Ozkan	Ozyegin University
Co-Chair: Altamirano Cabrera,	Skolkovo Institute of Science and
Miguel	Technology (Skoltech), Moscow,
<u> </u>	Russia
15:45-16:05	SuBM3.1
Understanding a Robot's Guiding E Generated Explanations	Ethical Principles Via Automatically
Krarup, Benjamin	King's College London
Lindner, Felix	University of Ulm
Krivic, Senka	University of Sarajevo
Long, Derek	King's College London
16:05-16:25	SuBM3.2
Selecting Objects on Conveyor Be Sensed by a Wrist-Worn Inertial M	
Abbate, Gabriele	IDSIA - Istituto Dalle Molle Di Studi sull'Intelligenza Artifici
Giusti, Alessandro	IDSIA Lugano, SUPSI
Paolillo, Antonio	IDSIA USI-SUPSI
Gambardella, Luca	USI-SUPSI
Rizzoli, Andrea Emilio	USI-SUPSI
Guzzi, Jerome	IDSIA, USI-SUPSI
16:25-16:45	SuBM3.3
Exploring the Role of Electro-Tactii Telemanipulation Task	le and Kinesthetic Feedback in
Trinitatova, Daria	Skolkovo Institute of Science and Technology
Altamirano Cabrera, Miguel	Skolkovo Institute of Science and Technology (Skoltech), Moscow,
Ponomareva, Polina	Skolkovo Institute of Science and Technology
Fedoseev, Aleksey	Skolkovo Institute of Science AndTechnology
Tsetserukou, Dzmitry	Skolkovo Institute of Science and Technology
16:45-17:05	SuBM3.4
LinkGlide-S: A Wearable Multi-Cor Rendering Object Softness at the F and Telemanipulation	ntact Tactile Display Aimed at Palm with Impedance Control in VR
Altamirano Cabrera, Miguel	Skolkovo Institute of Science and Technology (Skoltech), Moscow,
Tirado, Jonathan Andres	Skolkovo Institute of Sciences and Technology
Heredia, Juan	Skolkovo Institute of Science and Technology
Tsetserukou, Dzmitry	Skolkovo Institute of Science and Technology
17:05-17:25	SuBM3.5
	SuBM3.5 nan Intention Estimation for Human

University of California, San Diego

University of California, San Diego

University of California, San Diego

Liao, Jing-Yan

Christensen, Henrik

Paz, David

Ugur, Emre

Bebek, Ozkan

Bogazici University

Ozyegin University

Oztop, Erhan	Osaka University / Ozyegin University	Möller, Daniel	Chalmers University of Technology
17:25-17:45	SuBM3.6	Söderberg, Daniel	Daniel
Time Pressure Based Human W System for Human-Robot Collab	Vorkload and Productivity Compatible boration	Zhang, Ze	Chalmers University of Technology
Shirakura, Naoki	The National Institute of Advanced Industrial Science and Techno	Akesson, Knut	Chalmers University of Technology
Takase, Ryuichi	National Institute of Advanced	17:05-17:25	SuBM4.5
	Industrial Science and Technology	Towards Online Socially Acceptable	le Robot Navigation
Yamanobe, Natsuki	Advanced Industrial Science and Technology	Silva Mendoza, Steven Alexander	Cardiff University
Domae, Yukiyasu	The National Institute of Advanced	Paillacho, Dennys	Espol Polytechnic University
Ogoto Totouvo	Industrial Science and Techno Waseda University	Verdezoto Dias, Nervo Xavier	Cardiff University
Ogata, Tetsuya	Waseda Offiversity	Hernández, Juan David	Cardiff University
		17:25-17:45	SuBM4.6
SuBM4	Imperio A	Learning-Based Adaptive Sampling	g for Manipulator Motion Planning
Motion and Path Planning and		Gaebert, Carl	Chemnitz University of
Chair: Perrusquia, Adolfo	Cranfield University		Technology
Co-Chair: Guo, Weihong	Rutgers University	Thomas, Ulrike	Chemnitz University of Technology
15:45-16:05	SuBM4.1		redificiogy
Leveraging Neural Networks to			
Dataset Generation and Plannin	•	SuBM5	Imperio B
Baldoni, Philip	United States Naval Research Laboratory	Foundations of Automation and Session)	Optimal/Robust Control (Regular
McMahon, James	The Naval Research Laboratory	Chair: Gans, Nicholas (Nick)	University Texas at Arlington
Plaku, Erion	George Mason University	Co-Chair: Yang, Chenguang	University of the West of England
16:05-16:25	SuBM4.2	15:45-16:05	SuBM5.1
	Planning Approach for Range-Only	Optimal Deformation Control Frame	ework for Elastic Linear Objects
Underwater Target Localization		Aghajanzadeh, Omid	Universite Clermont Auvergne,
Masmitja, Ivan	Institut De Ciencies Del Mar - CSIC	Picard, Guillaume	Institut Pascal Universite Clermont Auvergne,
Martin, Mario	Universidad Politecnica De Catalunya	Corrales Ramon, Juan Antonio	Inrae Universidade De Santiago De
Katija, Kakani	Monterey Bay Aquarium Research	Cariou Christopho	Compostela INRAE
	Institute	Cariou, Christophe Lenain, Roland	INRAE
Castro, Spartacus	Universitat Politecnica De	Mezouar, Youcef	Clermont Auvergne INP - SIGMA
Navarro, Joan	Catalunya Institut De Ciencies Del Mar -	- Wezodai, Toddei	Clermont
	CSIC	16:05-16:25	SuBM5.2
16:25-16:45	SuBM4.3	Optimization of a State Feedback (
Anisotropic GPMP2: A Fast Con Based Motion Planner for Unma	ntinuous-Time Gaussian Processes	Tristán-Rodríguez, Diego	CINVESTAV-IPN
Environments with Ocean Curre		Garrido, Rubén	CINVESTAV, D.F
Meng, Jiawei	University College London	Mezura-Montes, Efren	University of Veracruz
Liu, Yuanchang	University College London	16:25-16:45	SuBM5.3
Bucknall, Richard	University College London	Simultaneous Parameter Estimatio	
Guo, Weihong	Rutgers University	Persistence of Excitation with Apple Hosseini Jafari, Bashir	Universit of Texas Atdallas
Ji, Ze	Cardiff University	Davoodi, Mohammadreza	University of Texas at Arlington
		Gans, Nicholas (Nick)	University Texas at Arlington
			, ,
16:45-17:05	SuBM4.4	16:45-17:05 A Game Benchmark for Real-Time	SuBM5.4
	Nonlinear Model Predictive Control for		
Online Robot Fleet Trajectory Pl	_	Meyer, Joel Pinosky, Allison	Northwestern University Northwestern University
Bertilsson, Filip	Chalmers University of Technology	Trzpit, Thomas	Northwestern University
Gordon, Martin	Chalmers University of	Colgate, Edward	Northwestern University
•	Technology	Murphey, Todd	Northwestern University
Hansson, Johan	Chalmers University of Technology	,,	

17:05-17:25	SuBM5.5		
Safe Online Gain Optimization	for Cartesian Space Variable	SuBM7	Colonia
Impedance Control	University of Colifornia Barkalay	Healthcare Management and	Automation (Regular Session)
Wang, Changhao Zhang, Xiang	University of California, Berkeley University of California, Berkeley	Chair: Chou, Chun-An	Northeastern University
Kuang, Zhian	UC Berkeley	Co-Chair: Zhong, Xiang	University of Florida
Tomizuka, Masayoshi	University of California	15:45-16:05	SuBM7.
17:25-17:45	SuBM5.6		Pathways to Support Intensive Care
A Novel Robot Skill Learning Fr		Delivery Trevena, William	University of Elevide
Teleoperation		Lal. Amos	University of Florida
Si, Weiyong	University of the West of England	Zec, Simon	Mayo Clinio Mayo Clinio
Yue, Tianqi	University of Bristol	Cubro, Edin	Mayo Clini
Guan, Yuan	Bristol Robotics Laboratory	Zhong, Xiang	University of Florida
Wang, Ning	University of the West of England	Dong, Yue	Mayo Clinic
Yang, Chenguang	University of the West of England	Gajic, Ognjen	Mayo Clinic
		16:05-16:25	SuBM7.2
SuBM6	Imperio C	Impacts of Proton Accelerator U	
Semiconductor Manufacturin	g and Production Scheduling	Performance of Proton Therapy	
(Regular Session)		Wang, Feifan	Mayo Clinic
Chair: Kim, Hyun-Jung	Korea Advanced Institute of	Huang, Yu-Li	Mayo Clinic
Ca Chair Chan Cann	Science and Technology	16:25-16:45	SuBM7.3
Co-Chair: Chen, Gang	Victoria University of Wellington	Dynamic Scheduling of Multi-Ap	
15:45-16:05	SuBM6.1	Replacement	,
A Branch and Price Approach E Modeling for Cluster Tool Sche	duling	Bakali El Kassimi, Ahmed	Group Aésio Santé, the Center for Health and Engineering CIS, Ed
Lee, Hyeong Yun	KAIST	Xie, Xiaolan	Ecole Des Mines De Saint Etienne
Lee, Tae-Eog	KAIST	Sarazin, Marianne	Umrs 1136 Inserm Cis Ecole Des
Kim, Hyun-Jung	Korea Advanced Institute of Science and Technology		Mines Saint Etienne
16:05-16:25	SuBM6.2	16:45-17:05	SuBM7.4
Spatio-Temporal Anomaly Dete Semiconductor Assembly Proce	ction for Substrate Strip Bin Map in ess	Ensemble Generative Adversar Multi-Generator (ESM-GAIN) fo	ial Imputation Network with Selective r Missing Data Imputation
Shen, Po-Cheng	National Cheng Kung University	Li, Yuxuan	Oklahoma State University
Lu, Meng-Xiu	National Cheng Kung University	Dogan, Ayse	University of Illinois at Urbana
Lee, Chia-Yen	National Taiwan University		Champaigr
16:25-16:45	SuBM6.3	Liu, Chenang	Oklahoma State University
	sed Dynamic Routing Algorithm for cles in Semiconductor Fabrication	17:05-17:25	SuBM7.5
Plants	cies in Semicondución Fabrication		ach for Spatio-Temporal Clinical Data
Lee, Jaeho	Korea Advanced Institute of	Yin, Yilin	Northeastern University
	Science and Technology	Chou, Chun-An	Northeastern University
Jang, Young Jae	Korea Advanced Institute of	17:25-17:45	SuBM7.6
	Science and Technology	An Efficient Simulation Budget Allocation for Pairwise Comparison	
16:45-17:05 A Dynamic Programming-Based	SuBM6.4 d Heuristic Algorithm for a Flexible Job	Xiao, Hui	Southwestern University of Finance and Economics
	Matrix System in Automotive Industry	Zhang, Yao	Southwestern University of
Minsoo, Kim	Korea Advanced Institute of Science and Technology	Zhang, Si	Finance and Economics Shanghai University
Jang, Young Jae	Korea Advanced Institute of Science and Technology		
17:05-17:25	SuBM6.5	SuP2L	Ballroom Laska
Multi-Agent Reinforcement Lea	rning for Real-Time Dynamic	Plenary II (Chengdu) (Plenary Chair: Zhao, Qianchuan	Session) Tsinghua University
Production Scheduling in a Rob	-	19:00-20:00	SuP2L.1
Johnson, Dazzle	Department of Mechanical and Mechatronics Engineering, the		SuP2L.1 Systems and Energy Revolution.
	Unive	Guan, Xiaohong	Systems and Energy Revolution. Xi'an Jiaotong University
Chen, Gang	Victoria University of Wellington	Guan, Alaunung	Aran Jiaotong University
Orion, Jung	riotoria orintorolly or troilington		

Diamana III (O)	Ballroom Laska	Zan, Xin	Xi'an Jiaotong University
Plenary III (Chengdu) (Plena		Wang, Fangshi	Beijing Jiaotong University
Chair: Li, Jingshan	Tsinghua University	Chen, Changchuan	Chongqing University of Posts and Telecommunication
20:00-21:00	SuP3L.1	Wei, Qi	Tsinghua Universit
Data Analytics and Optimizati	on for Smart Industry.	Liu, Xin-Jun	Tsinghua Universit
Tang, Lixin	Northeastern University	Qiao, Fei	Tsinghua Universit
		· · · · · · · · · · · · · · · · · · ·	·
SuCC1	Aries 1 & 2	22:35-22:55 Ougai Statio Wolking for Pine	SuCC1.5 ed Robots with a Sinusoidal Gait
	Scales 2 (Chengdu) (Regular Session)	Wu, Shuangfei	Tsinghua Shenzhen Internationa
Chair: Qiao, Fei	Tsinghua University	wu, Shuangiei	Graduate School, Tsinghua Unive
Co-Chair: Yang, Liangjing	Zhejiang University	Wang, Changliang	Shanghai Academy of Spacefligh
21:15-21:35	SuCC1.1	V- Linut	Technology
Keypoint Localization Based of Robotic Implantation of Flexib	on Convolutional Neural Network for ble Micro-Electrodes	Ye, Linqi	Tsinghua University Graduate School at Shenzher
Liang, Wenliang	Institute of Automation, Chinese	Wang, Xueqian	Tsinghua University
	Academy of Sciences	Liu, Houde	Shenzhen Graduate School Tsinghua University
Qin, Fangbo	Institute of Automation, Chinese Academy of Sciences	Liang, Bin	Tsinghua University
Han, Xinyong	Institute of Automation Chinese	22:55-23:15	SuCC1.6
Zhang, Dapeng	Academy of Sciences Institute of Automation, Chinese	An SEM-Based Nanomanipu Characterization of Single Ind	lation System for Multiphysical GaN/GaN Nanowires
o, 1 o	Academy of Sciences	Qu, Juntian	Tsinghua University
		Wang, Renjie	McGill University
21:35-21:55	SuCC1.2	Pan, Peng	McGill University
Self-Recalibrating Micromania	pulator System for Resilient Robotic	Du, Linghao	University of Toronto
Vision-Based Control.	,	Mi, Zetian	University of Michigar
Wang, Tiexin	Zhejiang University	Sun, Yu	University of Toronto
Li, Haoyu	Zhejiang University	Liu, Xinyu	University of Toronto
Pu, Tanhong	Zhejiang University	SuCC2	Aries 3
Ding, Jingjing	Zhejiang University		Aries
0 00			ing and Lagistics 2 (Changely)
Du, Shoukang			ing and Logistics 2 (Chengdu)
Du, Shoukang Chau, Zhong Hoo	Zhejiang University Singapore University of	(Regular Session) Chair: Li, Xinyu	Huazhong University of Science
•	Zhejiang University Singapore University of Technology and Design Singapore University of	(Regular Session)	Huazhong University of Science and Technology
Chau, Zhong Hoo Tan, U-Xuan	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design	(Regular Session) Chair: Li, Xinyu	Huazhong University of Science and Technology Tongji University
Chau, Zhong Hoo	Zhejiang University Singapore University of Technology and Design Singapore University of Techonlogy and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme	Huazhong University of Science and Technology Tongji University
Chau, Zhong Hoo Tan, U-Xuan	Zhejiang University Singapore University of Technology and Design Singapore University of Techonlogy and Design Zhejiang University-University of	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition	Huazhong University of Science and Technology Tongji University SuCC2.
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing	Zhejiang University Singapore University of Technology and Design Singapore University of Techonlogy and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme	Huazhong University of Science and Technology Tongji University SuCC2.* er for Class Imbalance in Surface Defect Huazhong University of Science
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition Li, Zhaofu	Huazhong University of Science and Technology Tongji University SuCC2. ² or for Class Imbalance in Surface Defect Huazhong University of Science and Technology
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Trajonal Safe Reinforcement Learning	Zhejiang University Singapore University of Technology and Design Singapore University of Techonlogy and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition	Huazhong University of Science and Technology Tongji University SuCC2.* For Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong Univ. of Sci. & Tech Huazhong University of Science
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition Li, Zhaofu Gao, Liang	Huazhong University of Science and Technology Tongji University SuCC2.1 For Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong Univ. of Sci. & Tech Huazhong University of Science
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Trajonal Safe Reinforcement Learning	Zhejiang University Singapore University of Technology and Design Singapore University of Techonlogy and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on Guangdong University of	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition Li, Zhaofu Gao, Liang Li, Xinyu 21:35-21:55	Huazhong University of Science and Technology Tongji University SuCC2.* For Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong University of Science and Technology and Technology
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji Safe Reinforcement Learning Xu, Yintao	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on Guangdong University of Technology Guangdong University of	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition Li, Zhaofu Gao, Liang Li, Xinyu 21:35-21:55	Huazhong University of Science and Technology Tongji University SuCC2.* For Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong University of Sci. & Tech Huazhong University of Science and Technology SuCC2.2 Feature Mapping for Image Anomaly
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji Safe Reinforcement Learning Xu, Yintao Wang, Tao	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on Guangdong University of Technology Guangdong University of Technology Guangdong University of	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition Li, Zhaofu Gao, Liang Li, Xinyu 21:35-21:55 Position Encoding Enhanced Detection	Huazhong University of Science and Technology Tongji University SuCC2.1 or for Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong Univ. of Sci. & Tech Huazhong University of Science and Technology SuCC2.2 Feature Mapping for Image Anomaly Huazhong University of Science and Technology Greater Mapping for Image Anomaly
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji Safe Reinforcement Learning Xu, Yintao Wang, Tao Chen, Chong	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on Guangdong University of Technology Guangdong University of Technology Guangdong University of Technology Guangdong University of Technology Guangdong University of	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transformer Recognition Li, Zhaofu Gao, Liang Li, Xinyu 21:35-21:55 Position Encoding Enhanced Detection Wan, Qian Cao, Yunkang	Huazhong University of Science and Technology Tongji University SuCC2.* For for Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong University of Science and Technology SuCC2.* Feature Mapping for Image Anomaly Huazhong University of Science and Technology
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji Safe Reinforcement Learning Xu, Yintao Wang, Tao Chen, Chong Hu, Bo	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on Guangdong University of Technology Guangdong University of Technology Guangdong University of Technology Guangdong University of Technology Guangdong University of	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition Li, Zhaofu Gao, Liang Li, Xinyu 21:35-21:55 Position Encoding Enhanced Detection Wan, Qian Cao, Yunkang Gao, Liang	Huazhong University of Science and Technology Tongji University SuCC2.1 For Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong University of Science and Technology SuCC2.2 Feature Mapping for Image Anomaly Huazhong University of Science and Technology Huazhong Univ. of Sci. & Tech
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji Safe Reinforcement Learning Xu, Yintao Wang, Tao Chen, Chong Hu, Bo 22:15-22:35 On the Way from Lightweight	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on Guangdong University of Technology SuCC1.4	Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition Li, Zhaofu Gao, Liang Li, Xinyu 21:35-21:55 Position Encoding Enhanced Detection Wan, Qian Cao, Yunkang Gao, Liang Shen, Weiming	Huazhong University of Science and Technology Tongji University SuCC2.* For for Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong University of Science and Technology SuCC2.* Feature Mapping for Image Anomaly Huazhong University of Science and Technology University of Science and Technology University of Science and Technology
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji Safe Reinforcement Learning Xu, Yintao Wang, Tao Chen, Chong Hu, Bo 22:15-22:35 On the Way from Lightweight	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on Guangdong University of Technology SuCC1.4	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition Li, Zhaofu Gao, Liang Li, Xinyu 21:35-21:55 Position Encoding Enhanced Detection Wan, Qian Cao, Yunkang Gao, Liang	Huazhong University of Science and Technology Tongji University SuCC2.1 For for Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong University of Science and Technology SuCC2.2 Feature Mapping for Image Anomaly Huazhong University of Science and Technology Huazhong University of Science
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji Safe Reinforcement Learning Xu, Yintao Wang, Tao Chen, Chong Hu, Bo 22:15-22:35 On the Way from Lightweight Heterogeneous Multi-Robot S	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on Guangdong University of Technology Guangdong University of Technology Guangdong University of Technology Guangdong University of Technology SuCC1.4 to Powerful Intelligence: A locial System with IoT Devices Tsinghua University Chongqing University of Posts and	Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transforme Recognition Li, Zhaofu Gao, Liang Li, Xinyu 21:35-21:55 Position Encoding Enhanced Detection Wan, Qian Cao, Yunkang Gao, Liang Shen, Weiming	Huazhong University of Science and Technology Tongji University SuCC2.1 or for Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong University of Science and Technology SuCC2.2
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji Safe Reinforcement Learning Xu, Yintao Wang, Tao Chen, Chong Hu, Bo 22:15-22:35 On the Way from Lightweight Heterogeneous Multi-Robot S Zhang, Qian Quan, Ruiyang	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 Ectory of Welding Manipulator Based on Guangdong University of Technology Guangdong University of Technology Guangdong University of Technology Chongqing University of Posts and Telecommunications	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transformer Recognition Li, Zhaofu Gao, Liang Li, Xinyu 21:35-21:55 Position Encoding Enhanced Detection Wan, Qian Cao, Yunkang Gao, Liang Shen, Weiming Li, Xinyu 21:55-22:15	Huazhong University of Science and Technology Tongji University SuCC2.1 For Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong University of Science and Technology SuCC2.2 Feature Mapping for Image Anomaly Huazhong University of Science and Technology
Chau, Zhong Hoo Tan, U-Xuan Chew, Ting Gang Yang, Liangjing 21:55-22:15 Learning Collision-Freed Traji Safe Reinforcement Learning Xu, Yintao Wang, Tao Chen, Chong Hu, Bo 22:15-22:35 On the Way from Lightweight Heterogeneous Multi-Robot S Zhang, Qian	Zhejiang University Singapore University of Technology and Design Singapore University of Technology and Design Singapore University of Technology and Design Zhejiang University-University of Edinburgh (ZJU-UoE) Institute Zhejiang University SuCC1.3 ectory of Welding Manipulator Based on Guangdong University of Technology Guangdong University of Technology Guangdong University of Technology Guangdong University of Technology SuCC1.4 to Powerful Intelligence: A locial System with IoT Devices Tsinghua University Chongqing University of Posts and	(Regular Session) Chair: Li, Xinyu Co-Chair: Wang, Junkai 21:15-21:35 A Logit Adjusting Transformer Recognition Li, Zhaofu Gao, Liang Li, Xinyu 21:35-21:55 Position Encoding Enhanced Detection Wan, Qian Cao, Yunkang Gao, Liang Shen, Weiming Li, Xinyu 21:55-22:15	Huazhong University of Science and Technology Tongji University SuCC2.1 For Class Imbalance in Surface Defect Huazhong University of Science and Technology Huazhong University of Science and Technology SuCC2.2 Feature Mapping for Image Anomaly Huazhong University of Science and Technology SuCC2.3

Ma, Nachuan	Tongji University	Lin, Shiyuan	Southern University of Science and Technology
Peng, Yun	Tongji University	Shi, Wujie	Southern University of Science
Liu, Chengju	Tongji University	Sili, Wujie	and Technology
Chen, Qijun 22:15-22:35	Tongji University SuCC2.4	Zhu, Zheng	Southern University of Science and Technology
	Reduction and Situation Awareness in	Che, Haichuan	Southern University of Science and Technology
Jiang, Baoxiang	Xi'an Jiaotong University	Yin, Siyuan	Southern University of Science
Liu, Yang	Xi'an Jiaotong University	,,	and Technology
Liu, Huixiang	Xi'an Jiaotong University	Zhang, Chi	Southern University of Science
Ren, Zehua	Xi'an Jiaotong University		and Technology
Wang, Yun	Xi'an JiaoTong University	Jia, Zhenzhong	Southern University of Science and Technology
Bao, YuanYi	Xi 'an Jiaotong University		
Wang, Wenqing	Xi'an Thermal Power Research	21:55-22:15	SuCC3.3
	Institute Co., LTD	Quaternion UDE-Based Robust Control	ol of Robot Manipulator Using Dual
22:35-22:55	SuCC2.5	Huang, Zhiheng	West China Hospital of Sichuan
Flexible 3D Object Appearance Regression and Active Motion	Observation Based on Pose	ridding, Erintering	University / University of Electr
Wang, Shaohu	Institute of Automation, Chinese	Lu, Qi	Sichuan University-Pittsburgh
Ç.	Academy of Sciences	Li, Xiangyun	Institute West China Hospital, Sichuan
Qin, Fangbo	Institute of Automation, Chinese Academy of Sciences	Li Kana	University Rutgers University
Shen, Fei	Institute of Automation, Chinese Academy of Sciences	Li, Kang	Ruigers Oniversity
Zhang, Zhengtao	Institute of Automation, Chinese	22:15-22:35	SuCC3.4
	Academy of Sciences		Reinforcement Learning Method for Top-K
22:55-23:15	SuCC2.6	Recommendation	
Novel Multi-Criteria Sustainable	e Evaluation for Production Scheduling	Ni, Shiying	Tsinghua University
Based on Fuzzy Analytic Netwo Theory-Enhanced VIKOR	ork Process and Cumulative Prospect	Li, Lefei 22:35-22:55	Tsinghua University SuCC3.5
Zhang, Peng	Tongji University		on Adjustable Exponential Basis for
Qiao, Fei	Tongji University	Image-Based Visual Servo	
Wang, Junkai	Tongji University	Li, Xiangfei	Huazhong University of Science and Technology
SuCC3	Taurus	Zhao, Huan	Huazhong University of Science
Foundations of Automation 2	2 (Chengdu) (Regular Session)		and Technology
Chair: Li, Lefei	Tsinghua University	Liu, Dong	Huazhong University of Science and Technology
Co-Chair: Li, Xiangfei	Huazhong University of Science and Technology	Yin, Yecan	Huazhong University of Science
21:15-21:35	SuCC3.1	Ding, Han	and Technology Huazhong University of Science
A Lagrangian Relaxation Heuri Intermodal Transportation	stic Approach for Coordinated Global	— Dirig, Hall	and Technology
Guo, Wenjing	Wuhan University of Technology	22:55-23:15	SuCC3.6
Negenborn, R.R.	Delft University of Technology		ased Multi-Agent System for Trade-Off
Atasoy, Bilge	Delft University of Technology	Hou, Chen	of Data and Cost of Data Usage China Agricultural University
21:35-21:55	SuCC3.2	Zhou, Cangqi	Nanjing University of Science and
Design, Control and Experimer Robot with Active Suspension	nts of an Agile Omnidirectional Mobile	Wu, Chu-ge	Technology Beijing Institute of Technology
Jiang, Shixing	Southern University of Science and Technology	Cong, Rui	Beijing Information Science and Technology University
Li, Zhuolun	Southern University of Science and Technology	Li, Kun	Hebei University of Technology
-			00 0000

Technical Program for Monday August 22, 2022

	Salon Fiestas
MoP1L	
Plenary IV (Plenary Session)	

Chair: Yi, Jingang Rutgers University

08:00-09:00 MoP1L.1

Evolvable Field-Level Automation Architectures to Leverage Al for Physical Manufacturing and Logistics Systems.

Vogel-Heuser, Birgit Technical University Munich

MolP11	Imperio A
Industrial Panel 1 (Plenary Session	•
Chair: Ramirez, Antonio	Cinvestav
09:10-10:10	MoIP11.1
Panel Discussion on Artificial Intelli	· ·
Ramirez, Antonio	Cinvestav
MoAw1H	Salon Fiestas
Best Healthcare Automation Pap Session)	er Award Session (Special
Chair: Li, Jingshan	Tsinghua University
09:10-10:10	MoAw1H.1
A Physiological Status Diagnosis N Regularization	Method Using Tensor-Based
An, Yu	Peking University
Chen, Shanen	Peking University
Zhang, Xi	College of Engineering, Peking University
09:10-10:10	MoAw1H.2
Prediction of Diabetic Retinopathy Health Records	Using Longitudinal Electronic
Chen, Suhao	Oklahoma State University
Wang, Zekai	Oklahoma State University
Yao, Bing	Oklahoma State University
Liu, Tieming	Oklahoma State University
09:10-10:10	MoAw1H.3
Generating Counterfactual Explana Breast Cancer Treatment Respons	
Zhou, Siqiong	Arizona State University
Pfeiffer, Nicholaus	Mayo Clinic Arizona
Islam, Upala	Arizona State University
Banerjee, Imon	Mayo Clinic Arizona
Patel, Bhavika	Mayo Clinic Arizona
Iquebal, Ashif	Arizona State University
MoIP22	Imperio A
Industrial Panel 2 (Plenary Session	
Chair: Burnstein, Jeff	Association for Advancing Automation
10:10-11:10	MoIP22.1
Trends in Industrial Automation.	
Burnstein, Jeff	Association for Advancing Automation
MoAw2S	Salon Fiestas
Best Student Paper Award Sessi	
Chair: Dotoli, Mariagrazia	Politecnico Di Bari
10:10-10:30	MoAw2S.1

Towards Object Agnostic and Robust 4-DoF Table-Top Grasping

IIT KANPUR

TCS

Indian Institute of Technology, Kanpur

Raj, Prem

Kumar, Ashish

Sanap, Vipul

Sandhan, Tushar	Indian Institute of Technology Kanpur
Behera, Laxmidhar	IIT Kanpur
10:30-10:50	MoAw2S.2
Robust Physics Guided Data-Drive	en Fleet Battery Pack Fault
Detection under Dynamic Operation	
Peng, Xiaomeng	Northeastern University
Jin, Xiaoning	Northeastern University
Shiming, Duan	General Motors
Sankavaram, Chaitanya	General Motors
10:50-11:10	MoAw2S.3
A4T: Hierarchical Affordance Dete Depth Reconstruction and Manipu	
Jiang, Jiaqi	King's College London
Cao, Guanqun	University of Liverpool
Do, Thanh-Toan	Monash University
Luo, Shan	King's College London
11:10-11:30	MoAw2S.4
3D Pose Identification of Moving M	
Suspensions under Bright-Field M	• •
Song, Jiaxu	Binghamton University
Wu, Juan	Binghamton University
Yu, Kaiyan	Binghamton University
11:30-11:50	MoAw2S.5
Optimal Shelf Arrangement to Min	nimize Robot Retrieval Time
Chen, Lawrence Yunliang	UC Berkeley
Huang, Huang	University of California at Berkeley
Danielczuk, Michael	UC Berkeley
Ichnowski, Jeffrey	UC Berkeley
Goldberg, Ken	UC Berkeley
MoAM1	Constitucion A
Motion and Robot Control 1 (Re	gular Session)
Chair: Dotoli, Mariagrazia	Politecnico Di Bari
Co-Chair: Hajieghrary, Hadi	Chalmers University of

Co-Chair: Hajieghrary, Hadi	Chalmers University of Technology	
13:30-13:50	MoAM1.1	
Dual Constraint-Based Controllers for	Wheeled Mobile Manipulators	
Caliskan, Umut	Flanders Make	
Ulloa Rios, Federico	KU Leuven	
Decré, Wilm	Katholieke Universiteit Leuven	
Aertbelien, Erwin	KU Leuven	
13:50-14:10	MoAM1.2	
Bayesian Optimization Based Nonlinear Adaptive PID Design for Robust Control of the Joints at Mobile Manipulators		
Hajieghrary, Hadi	Chalmers University of Technology	
Deisenroth, Marc Peter	University College London	
Bekiroglu, Yasemin	Chalmers University of Technology	
14:10-14:30	MoAM1.3	

Observer-Free Output Feedback Tracking Control for Collaborative
Robotics, pp. 978-983.

Alqatamin, Moath

Taghavi, Nazita

Louisville Automation and
Robotics Research Institute,
Universit

Das, Sumit Kumar	University of Louisville	Bi, Jing	Beijing University of Technology Beijing 100124, China
Popa, Dan	University of Louisville	Zhou, MengChu	New Jersey Institute of
14:30-14:50	MoAM1.4		Technology
Active Disturbance Rejection Contro Disturbed Piezoelectric Actuator Dev		14:30-14:50	MoAM2.4
Khadraoui, Sofiane	University of Sharjah	A Voltage Deviation Threat Via L Distribution Network	Distributed Load Perturbation in
Rakotondrabe, Micky	Laboratoire Génie De Production (LGP)	Huang, Hao	Department of Cyber Security
Flores, Gerardo	Center for Research in Optics		Guangdong Power Dispatching and Co
14:50-15:10	MoAM1.5	Yang, Chenyang	Xi'an Jiaotong University
An Adaptive Model Predictive Control and Force Control of a Hydraulic Act	tuator	Tang, Yi	Department of Cyber Security, Guangdong Power Dispatching
Bozza, Augusto	Polytechnic of Bari	Wu, Qingin	and Co Department of Cyber Security
Askari, Bahman	Politecnico Di Bari	wa, Qinqin	Guangdong Power Dispatching
Cavone, Graziana	University of Roma Tre		and Co
Carli, Raffaele	Politecnico Di Bari	Mei, Famao	Department of Cyber Security
Dotoli, Mariagrazia	Politecnico Di Bari		Guangdong Power Dispatching and Co
15:10-15:30	MoAM1.6	Gu, Zhenwei	Department of Cyber Security
A Detection Strategy for Setpoint Att Robots	acks against Differential-Drive	Gu, Zhonwei	Guangdong Power Dispatching and Co
Cersullo, Mattia	University of Calabria	Zhou, Yadong	Xi'an Jiaotong University
Tiriolo, Cristian	Concordia University	14:50-15:10	MoAM2.5
Franzè, Giuseppe Lucia, Walter	University of Calabria Concordia University	-	age Production Systems Using a
		Li, Yang	Northwestern Polytechnica University
MoAM2 Cyber-Physical Production Syster	Constitucion B ms and Industry 4.0 2 (Regular	Cui, Peng-Hao	Northwestern Polytechnica
		Cui, Peng-Hao Wang, Jun-Qiang	Northwestern Polytechnica University Northwestern Polytechnica
Cyber-Physical Production System Session)	University of Virginia New Jersey Institute of		Northwestern Polytechnica University Northwestern Polytechnica University
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu	University of Virginia New Jersey Institute of Technology	Wang, Jun-Qiang	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia
Cyber-Physical Production System Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model	University of Virginia New Jersey Institute of Technology MoAM2.1	Wang, Jun-Qiang Chang, Qing 15:10-15:30	Northwestern Polytechnica University Northwestern Polytechnica University University University of Virginia MoAM2.6 for Integrated Production Scheduling
Cyber-Physical Production System Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation	University of Virginia New Jersey Institute of Technology MoAM2.1	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes
Cyber-Physical Production System Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and	Northwestern Polytechnica University Northwestern Polytechnica University University University of Virginia MoAM2.6 for Integrated Production Scheduling
Cyber-Physical Production System Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Chongqing University
Cyber-Physical Production System Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University Xi'an Jiaotong University Xian Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Chongqing University
Cyber-Physical Production System Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University Xi'an Jiaotong University Xi'an Jiaotong University Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University
Cyber-Physical Production System Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University Xi'an Jiaotong University Xian Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Chongqing University Chongqing University
Cyber-Physical Production System Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Chongqing University Chongqing University Chongqing University
Cyber-Physical Production System Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Chongqing University Chongqing University Chongqing University Chongqing University
Cyber-Physical Production System Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and	Northwestern Polytechnica University Northwestern Polytechnica University University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Chongqing University Chongqing University Chongqing University Chongqing University Chongqing University
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10 Robust Constraints-Based Supply-D	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco 13:30-13:50	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Clonstitucion C d Automation 1 (Regular Session) Texas A&M University CINVESTAV
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10 Robust Constraints-Based Supply-D Systems of Enterprise Microgrid	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University MoAM2.2 Demand Coordination with Storage	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco 13:30-13:50	Northwestern Polytechnica University Northwestern Polytechnica University University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10 Robust Constraints-Based Supply-D Systems of Enterprise Microgrid Liu, Kun	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco 13:30-13:50 GUM: A Guided Undersampling	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University CINVESTAV MoAM3.1 Method to Preprocess Imbalanced
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Mode. Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10 Robust Constraints-Based Supply-D Systems of Enterprise Microgrid Liu, Kun Gao, Feng	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University MoAM2.2 Demand Coordination with Storage Xi'an Jiaotong University Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco 13:30-13:50 GUM: A Guided Undersampling Datasets for Classification	Northwestern Polytechnica University Northwestern Polytechnica University University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University CINVESTAV MoAM3.1 Method to Preprocess Imbalanced Samsung Life Insurance
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Mode. Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10 Robust Constraints-Based Supply-D Systems of Enterprise Microgrid Liu, Kun Gao, Feng Xu, Zhanbo	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco 13:30-13:50 GUM: A Guided Undersampling Datasets for Classification Sung, Kisuk	Northwestern Polytechnica University Northwestern Polytechnica University University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Chongding University
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10 Robust Constraints-Based Supply-D Systems of Enterprise Microgrid Liu, Kun Gao, Feng Xu, Zhanbo Wu, Jiang	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco 13:30-13:50 GUM: A Guided Undersampling Datasets for Classification Sung, Kisuk Brown, W. Eric	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Model Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10 Robust Constraints-Based Supply-D Systems of Enterprise Microgrid Liu, Kun Gao, Feng Xu, Zhanbo Wu, Jiang Dai, Shihao	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco 13:30-13:50 GUM: A Guided Undersampling Datasets for Classification Sung, Kisuk Brown, W. Eric Moreno-Centeno, Erick Ding, Yu	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University CINVESTAV
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Mode. Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10 Robust Constraints-Based Supply-D Systems of Enterprise Microgrid Liu, Kun Gao, Feng Xu, Zhanbo Wu, Jiang Dai, Shihao Guan, Xiaohong 14:10-14:30 Cost-Minimized User Association an	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University MoAM2.3	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco 13:30-13:50 GUM: A Guided Undersampling Datasets for Classification Sung, Kisuk Brown, W. Eric Moreno-Centeno, Erick Ding, Yu 13:50-14:10 Object Goal Navigation Using Datasets	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Chongqing
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Mode. Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10 Robust Constraints-Based Supply-D Systems of Enterprise Microgrid Liu, Kun Gao, Feng Xu, Zhanbo Wu, Jiang Dai, Shihao Guan, Xiaohong 14:10-14:30 Cost-Minimized User Association and Dependent Tasks in Hybrid Cloud-E	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University MoAM2.3 Ind Partial Offloading for idge Systems	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco 13:30-13:50 GUM: A Guided Undersampling Datasets for Classification Sung, Kisuk Brown, W. Eric Moreno-Centeno, Erick Ding, Yu 13:50-14:10 Object Goal Navigation Using Data Nandiraju, Gireesh	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Chongqing
Cyber-Physical Production Syster Session) Chair: Chang, Qing Co-Chair: Zhou, MengChu 13:30-13:50 A Dynamic Cascading Failure Mode. Energy Generation Yang, Yujie Zhou, Yadong Wu, Jiang Liu, Ting Xu, Zhanbo Guan, Xiaohong 13:50-14:10 Robust Constraints-Based Supply-D Systems of Enterprise Microgrid Liu, Kun Gao, Feng Xu, Zhanbo Wu, Jiang Dai, Shihao Guan, Xiaohong 14:10-14:30 Cost-Minimized User Association an	University of Virginia New Jersey Institute of Technology MoAM2.1 If in Power Grid with Renewable Xi'an Jiaotong University MoAM2.3	Wang, Jun-Qiang Chang, Qing 15:10-15:30 A Bi-Level Optimization Method between Continuous Casting and Tang, Wei Cao, Lingling Wen, Yao min Jiang, Sheng-long MoAM3 Deep Learning in Robotics and Chair: Ding, Yu Co-Chair: Sabas, Juan Francisco 13:30-13:50 GUM: A Guided Undersampling Datasets for Classification Sung, Kisuk Brown, W. Eric Moreno-Centeno, Erick Ding, Yu 13:50-14:10 Object Goal Navigation Using Datasets	Northwestern Polytechnica University Northwestern Polytechnica University University of Virginia MoAM2.6 for Integrated Production Scheduling d Hot Rolling Processes Chongqing University Chongqing

Banerjee, Snehasis	Tata Consultancy Services	Bhatt, Neel P.	University of Waterloo
Sridharan, Mohan	University of Birmingham	Hashemi, Ehsan	University of Alberta
Bhowmick, Brojeshwar	Tata Consultancy Services		
Krishna, Madhava	IIIT Hyderabad	13:50-14:10	MoAM4.2
14:10-14:30	MoAM3.3	Efficient WiFi LiDAR SLAM for A	
	nulation Environment for Concurrent	Environments	
Deep Reinforcement Learning		Ismail, Khairuldanial	Singapore University of Technology and Design
Kapukotuwa, Jayasekara	Technological University of the Shannon: Midlands Midwest	Liu, Ran	Southwest University of Science and Technology
Lee, Brian	Technological University of the Shannon	Qin, Zhenghong	Southwest University of Science and Technology
Devine, Declan	Technological University of the Shannon: Midlands Midwest	Athukorala, Achala	Zone 24x7 Pvt Ltd
Qiao, Yuansong	Technological University of the Shannon: Midlands Midwest	Lau, Billy Pik Lik	Singapore University of Technology and Design
14:30-14:50	MoAM3.4	Bin Othman, Muhammad Shalihan	Singapore University of Technology and Design
FRobs_RL: A Flexible Robotics R	Reinforcement Learning Library	Yuen, Chau	Singapore University of
– Fajardo, Jose Manuel	National University of Colombia	ruen, Chau	Technology and Design
Gonzalez, Felipe	Universidad Nacional De Colombia	Tan, U-Xuan	Singapore University of Techonlogy and Design
Realpe, Sebastian	Universidad Nacional De Colombia	14:10-14:30	MoAM4.3
Hernández, Juan David	Cardiff University	Dynamical Scene Representation Conditioned Neural Radiance Figure 1	
Ji, Ze	Cardiff University	Wang, Weiyao	The Johns Hopkins University
Cardenas, Pedro	UNIVERSIDAD Nacional De	Morgan, Andrew	Yale University
	Colombia	Dollar, Aaron	Yale University
14:50-15:10	MoAM3.5	Hager, Gregory	Johns Hopkins University
Multimodal Motion Prediction Bas Sampling Loss Functions for Rea		14:30-14:50	MoAM4.4
Zhang, Ze	Chalmers University of	Extremal Point Tracking on Smo	ooth Surfaces
-	Technology	Madsen, Steffen	The University of Southern Denmark
Dean, Emmanuel	Chalmers University of Technology	Jami, Milad	Novo Nordisk A/S
Karayiannidis, Yiannis	Lund University	Petersen, Henrik Gordon	University of Southern Denmark
Akesson, Knut	Chalmers University of	14:50-15:10	MoAM4.5
	Technology		from Stereo Image Pair of Weld Pool
15:10-15:30	MoAM3.6	in GMAW Process by Deep Lea	rning
Learning Switching Criteria for Sin Manipulation Policies	m2Real Transfer of Robotic Fabric	Liang, Zhimin	Hebei University of Science and Technology
Sharma, Satvik	University of California, Berkeley	Gao, Xu	Hebei University of Science &
Novoseller, Ellen	University of California, Berkeley		Technology
Viswanath, Vainavi	University of California, Berkeley	Zhang, Kun	Hebei University of Science & Technology
Javed, Zaynah	University of California, Berkeley	Wang, Dianlong	Hebei University of Science and
Parikh, Rishi	University of California Berkeley	Wang, Diamong	Technology
Hoque, Ryan	University of California, Berkeley	Wang, Liwei	Hebei University of Science and
Brown, Daniel	University of Utah		Technology
Balakrishna, Ashwin	University of California, Berkeley	15:10-15:30	MoAM4.6
Goldberg, Ken	UC Berkeley	Directed Data Association for Si	ingle Object Tracking in Point Clouds
		Zhang, Yongchang	Institute of Automation, Chinese Academy of Sciences, Beijing, C
MoAM4	Imperio A	Guo, Yue	Chinese Academy of Sciences
Computer Vision for Manufactu (Regular Session)		Niu, Hanbing	University of Electronic Science and Technology of China
Chair: Hashemi, Ehsan	University of Alberta	He, Wenhao	University of Chinese Academy of
13:30-13:50	MoAM4.1		Sciences
Augmented Visual Localization U Autonomous Mobile Robots	oniy a Monocular Carriera Tor	MoAM5	Imperio B
Salimzadeh, Ali	University of Alberta	Planning, Scheduling and Cod	·

		•	
Chair: Carpin, Stefano	University of California, Merced	Polic, Marsela	University of Zagreb
Co-Chair: Mehta, Ishaan	Toronto Metropolitan University	Orsag, Matko	University of Zagreb, Faculty of Electrical Engineering and Comp
13:30-13:50	MoAM5.1	14:10-14:30	MoAM6.3
Deadlock Avoidance Algorithm for Fransen, Karlijn	Eindhoven University of		Complex Tasks for Heterogeneous
Reniers, Michel	Technology Eindhoven University of Technology	Arbanas Ferreira, Barbara	University of Zagreb, Faculty of Electrical Engineering and Comp
van Eekelen, Joost	Eindhoven University of	Petrovic, Tamara	Univ. of Zagreb
van Eckelen, voost	Technology	Bogdan, Stjepan	University of Zagreb
13:50-14:10	MoAM5.2	14:30-14:50	MoAM6.4
Solving Stochastic Orienteering Pr Using Monte Carlo Tree Search	roblems with Chance Constraints	Automatic Lighting Control and Id Greenhouse	oT Monitoring on an Indoor-
Thayer, Thomas C.	University of California, Merced	Contreras, Cuauhtemoc	Cinvestav Guadalajara
Carpin, Stefano	University of California, Merced	Begovich, Ofelia	CINVESTAV - Gdl
14:10-14:30	MoAM5.3	14:50-15:10	MoAM6.5
An Innovative Formulation Tighten Scheduling	ning Approach for Job-Shop	Development and Testing of a Sr of Black Soldier Fly Larvae	mart Bin Toward Automated Rearing
Yan, Bing	Rochester Institute of Technology	Urrutia Avila, Kevin	University of California, Riverside
Bragin, Mikhail	University of Connecticut	Campbell, Merrick	University of California, Riverside
Luh, Peter	University of Connecticut	Mauck, Kerry	University of California, Riverside
14:30-14:50	MoAM5.4	Gebiola, Marco	University of California, Riverside
Rendezvous Scheduling for Charg	ging Coordination between Aerial	Karydis, Konstantinos	University of California, Riverside
Robot - Mobile Ground Robot		15:10-15:30	MoAM6.6
Eker, Ahmet Harun	Bogazici University	Wearable Inertial Sensor-Based	Limb Lameness Detection and Pose
Öncü, Ahmet	Bogazici University	Estimation for Horses	
Bozma, H. Isil	Bogazici University	Yigit, Tarik	Rutgers University
14:50-15:10	MoAM5.5	Han, Feng	Rutgers University
Pareto Frontier Approximation Net	work (PA-Net) to Solve Bi-	Rankins, Ellen	Rutgers University
Objective TSP	Townsto Markey although heimenite	Yi, Jingang	Rutgers University
Mehta, Ishaan	Toronto Metropolitan University	McKeever, Kenneth Malinowski, Karyn	Rutgers University Rutgers University
Taghipour, Sharareh Saeedi, Sajad	Toronto Metropolitan University Toronto Metropolitan University	Maiillowski, Kalyli	Ruigers Oniversity
· · · · · · · · · · · · · · · · · · ·			
15:10-15:30 On Controlling Battery Degradation	MoAM5.6	MoAM7	Colonia
Markets	I'lli Vellicie-10-Glia Ellergy	Automation in Construction an	, ,
Scarabaggio, Paolo	Politecnico Di Bari	Chair: Ferrarini, Luca	Politecnico Di Milano
Carli, Raffaele	Politecnico Di Bari	Co-Chair: Yi, Jingang	Rutgers University
Parisio, Alessandra	The University of Manchester	13:30-13:50	MoAM7.1
Dotoli, Mariagrazia	Politecnico Di Bari	Automated Hammering Inspectio Mobile Robot for Concrete Struct	ures
Ma A MC	l	Nishimura, Yuki	University of Tsukuba
MoAM6	Imperio C	Takahashi, Shuki	University of Tsukuba, Intelligent and Mechanical Interaction Sy
Agricultural Automation 2 (Regu		Mochiyama, Hiromi	University of Tsukuba
Chair: Karydis, Konstantinos Co-Chair: Begovich, Ofelia	University of California, Riverside CINVESTAV - Gdl	Yamaguchi, Tomoyuki	University of Tsukuba
		13:50-14:10	MoAM7.2
13:30-13:50	MoAM6.1	Digital Twin-Based Collision Avoi	
Detection	aging Simulated Data for Crop Row	Excavator with Automatic 3D LiD. Satoh, Mineto	
de Silva, Rajitha	University of Lincoln		·
Cielniak, Grzegorz	University of Lincoln	14:10-14:30	MoAM7.3
Gao, Junfeng	University of Lincoln	Neural Network Predictive Schen Control: A Comparative Study	nes tor Building Temperature
13:50-14:10	MoAM6.2	Ferrarini, Luca	Politecnico Di Milano
Introducing Multispectral-Depth (M Range Multispectral Imaging	IS-D): Sensor Fusion for Close	Rastegarpour, Soroush	Politecnico Di Milano

University of Zagreb, Faculty of Electrical Engineering and Comp

Vuletic, Jelena

14:30-14:50	MoAM7.4	Da Cruz, Lyndon	Moorfields Eye Hospita
Smartphone-Based Real-Time Inc	door Positioning Using BLE	Rhode, Kawal	King's College Londor
Beacons	Heironeite of Occasions	Bergeles, Christos	King's College Londor
Riesebos, Robert	University of Groningen University of Groningen	17:25-17:45	MoBM1.6
Degeler, Viktoriya Tello, Andrés	Bernoulli Institute for Mathematics,	A Digital Twin Framework for Tele Network Quality of Service, pp. 12	surgery in the Presence of Varying 86-1293.
	Computer Science, and Artif	Bonne, Sophea	UC Berkeley
14:50-15:10	MoAM7.5	Panitch, William	University of California, Berkeley
	note Health Prediction in Distributed	Dharmarajan, Karthik	UC Berkele
Automation Systems	National Chang Kung University	Srinivas, Kishore	UC Berkeley
Hsieh, Yu-Ming	National Cheng Kung University, Institute of Manufacturing Infor	Kincade, Jerri-Lynn	UC Berkeley
Wilch, Jan	Technical University of Munich	Low, Thomas	SRI Internationa
Lin, Chin-Yi	National Cheng Kung University	Knoth, Bruce	SRI Internationa
Vogel-Heuser, Birgit	Technical University Munich	Cowan, Cregg Fer, Danyal	SRI Internationa University of California, Sar
Cheng, Fan-Tien	National Cheng Kung University	rei, Dailyai	Francisco East Ba
15:10-15:30	MoAM7.6	Thananjeyan, Brijen	UC Berkeley
Energy-Efficient Control in a Two-	-Stage Production Line with Parallel	Kerr, Justin	University of California, Berkeley
Machines	3	Ichnowski, Jeffrey	UC Berkeley
Loffredo, Alberto	Politecnico Di Milano	Goldberg, Ken	UC Berkeley
Frigerio, Nicla	Politecnico Di Milano		
Lanzarone, Ettore	National Research Council of Italy	MoBM2	Constitucion E
Matta, Andrea	Politecnico Di Milano	Computer Vision in Automation	
		Chair: Yu, Kaiyan	Binghamton University
MoBM1	Constitucion A	Co-Chair: Sabas, Juan	CINVESTAV
Industrial Robots (Regular Sess	ion)	Francisco	
Chair: D'Avella, Salvatore	Scuola Superiore Sant'Anna	15:45-16:05	MoBM2.1
Co-Chair: Liu, Yugang	Royal Military College of Canada	Ellipsoid SLAM with Novel Object	Initialization, pp. 1294-1299.
15:45-16:05	MoBM1.1	Meng, Yongqi	Karlsruhe Institute of Technology KIT, Germany
A Laser Intensity Based Autonom Application to Mobile Robot Rech Environments		Zhou, Benchun	Karlsruhe Institute of Technology KIT, Germany
Liu, Yugang	Royal Military College of Canada	16:05-16:25	MoBM2.2
16:05-16:25	MoBM1.2	Flow Synthesis Based Visual Serv	
Handling-Design Method by Multi		Obstacle Avoidance Amidst High-I	
Shape Watanabe, Kosuke	University of Tsukuba	Caritina, Flaronit Ramai	Information Technology (IIIT)
Sato, Shunsuke	University of Tsukuba		Hydera
Aiyama, Yasumichi	University of Tsukuba	Qureshi, Mohammad Nomaan	International Institute of
	MoBM1.3		Information Technology (IIIT) Hydera
16:25-16:45 Towards Autonomous Soft Grasp Flexible Thin-Film Electro-Adhesi	ing of Deformable Objects Using	Vaidyanathan, Shankara Narayanan	International Institute o Information Technology (IIIT)
D'Avella, Salvatore	Scuola Superiore Sant'Anna		Hydera
Fontana, Marco	Scuola Superiore Sant'Anna	Mittal, Vedansh	International Institute o
Vertechy, Rocco	University of Bologna		Information Technology (IIIT) Hydera
Tripicchio, Paolo	Scuola Superiore Sant'Anna	Gupta, Gunjan	International Institute o
16:45-17:05	MoBM1.4		Information Technology (IIIT) Hydera
Robust Position Regulation of a S	Seesaw Actuated by a Humanoid	Pandya, Harit	Cambridge Research Laboratory
Santos Miguel, Orozco Soto	Consorzio CREATE		Toshiba Europe, Cambridge, Uk
Ibarra Zannatha, Juan Manuel	CINVESTAV	Krishna, Madhava	IIIT Hyderabad
Kheddar, Abderrahmane	CNRS-AIST	16:25-16:45	MoBM2.
17:05-17:25	MoBM1.5	Object-Based Loop Closure with E	
Instrument Remote Centre of Mot Vitreoretinal Surgery	tion Estimation for Robot-Assisted	pp. 1307-1312. Zhou, Benchun	Karlsruhe Institute of Technology
Birch, Jeremy	King's College London		KIT, German
Nousias Sotirios	NITIIA	Meng, Yonggi	Karlsruhe Institute of Technology

Meng, Yongqi

NTUA

Nousias, Sotirios

Karlsruhe Institute of Technology,

	KIT, Germany	Kharyal, Chaitanya	IIIT Hyderabad
16:45-17:05	MoBM2.4	Kumar, Gulshan	International Institute of
Deep Learning Based Sustainable			Information Technology, Hyderabad
pp. 1313-1318.	ITC Infatach	Nandiraju, Gireesh	IIIT Hyderabad
Nicherala, Yaswanth Kumar	ITC Infotech ITC Infotech	Banerjee, Snehasis	Tata Consultancy Services
Sadula, Srikrishna		Roychoudhury, Ruddra dev	TCS Research & Innovation
Venkataraman, Prasanna Shrinivas	ITC Infotech	Sridharan, Mohan	University of Birmingham
-		Bhowmick, Brojeshwar	Tata Consultancy Services
17:05-17:25	MoBM2.5	Krishna, Madhava	IIIT Hyderabad
Detection of Camera Model Incon- Optical Image Stabilization System		17:05-17:25	MoBM3.5
Yeh, Shu-Hao	Texas A&M University	High-Level Reward Deep Reinfo	orcement Learning Approach for a
Wang, Di	Texas A&M University	Novel Physical-Logical Hybrid F	actory Line Robot Vehicle Simulation
Yan, Wei	Texas A&M University	Higa, Ryota	NEC Corporation, National
Song, Dezhen	Texas A&M University		Institute of Advanced Industrial Scien
17:25-17:45	MoBM2.6	Nakadai, Shinji	NEC Corporation
Rotated Bounding Box Detector w			
Orientation by Rotating Images	anout filmotation of object	17:25-17:45	MoBM3.6
Sakai, Ryo	Hitachi, Ltd	Assembly, pp. 1366-1371.	Learning with Application to Robotic
Yano, Taiki	Hitachi, Ltd	Langaa, Jeppe	University of Southern Denmark
Kimura, Nobutaka	Hitachi, Ltd	Sloth, Christoffer	University of Southern Denmark
Ito, Kiyoto	Research and Development Group, Hitachi, Ltd	Clour, Officialist	Oniversity of Goddient Benmark
		MoBM4	Imperio A
	0 # 1 0	Motion and Path Planning and	Control 2 (Regular Session)
MoBM3	Constitucion C	Chair: Shan, Jinjun	York University
Deep Learning in Robotics and		Co-Chair: Roy, Dibyendu	Tata Consultancy Services Limited
Chair: Higa, Ryota	NEC Corporation, National Institute of Advanced Industrial	15:45-16:05	MoBM4.1
	Science and Technology		inuous-Path Polynomial Trajectories
Co-Chair: Wang, Haiyan	Hitachi America, Ltd	for Quadrotors	,
15:45-16:05	MoBM3.1	Alkomy, Hassan	York University
NLOS Ranging Mitigation with Ne		Shan, Jinjun	York University
Localization		16:05-16:25	MoBM4.2
Bin Othman, Muhammad Shalihan	Singapore University of Technology and Design	Smooth Spline-Based Trajectory Formations	Planning for Semi-Rigid Multi-Robot
Liu, Ran	Southwest University of Science	Recker, Tobias	Leibniz University Hanover
	and Technology	Raatz. Annika	Leibniz Universität Hannover
Yuen, Chau	Singapore University of	Lurz, Henrik	Leibniz University Hanover
	Technology and Design		
16:05-16:25	MoBM3.2	16:25-16:45	MoBM4.3
Non-Parametric Stochastic Policy Non-Stationary Environment	Gradient with Strategic Retreat for	on Integral Extended-State LQG	Control of a UAS Rotorcraft Based
Dastider, Apan	University of Central Florida	Zioud, Tariq	Université De Limoges XLIM UMR
Mingjie, Lin	University of Central Florida	Facerone Ivan Antonia	CNRS 7252 University of Limoges, ENSIL-
16:25-16:45	MoBM3.3	Escareno, Juan-Antonio	ENSCI, XLIM Research Institute
	ward Robust Multi-Echelon Supply	Labbani-Igbida, Ouiddad	UMR University of Limoges ENSIL
El Shar, Ibrahim	University of Pittsburgh		Engineering School XLIM Insti
Sun, Wenhuan	Carnegie Mellon University	16:45-17:05	MoBM4.4
Wang, Haiyan	Hitachi America, Ltd	Complete Decomposition-Free 0	
Chetan, Gupta	Hitachi America Ltd	Kusnur, Tushar	Carnegie Mellon University
· ·		Likhachev, Maxim	Carnegie Mellon University
16:45-17:05 Spatial Relation Graph and Graph	MoBM3.4	17:05-17:25	MoBM4.5
Goal Navigation	Convolutional Network for Object		Areas by Swarm of Robots Utilizing
Dharmala, Amarthya Sasi	International Institute of	Virtual-Region Based Splitting a	
Kiran	Information Technology,	Roy, Dibyendu	Tata Consultancy Services Limited
A 1.12.111	Hyderabad	Maitra, Madhubanti	JADAVPUR UNIVERSITY
Anand, Kritika	TCS Innovation Labs		

Bhattacharya, Samar	Jadavpur University		Binghamton
17:25-17:45	MoBM4.6	15:45-16:05	MoBM6.1
Deterministic Path Optimization in 21)		ed Generative Adversarial Network
Khazaei Pool, Maryam	University of California Merced	(CoD-GAN) for the Data Augmenta	
Diaz Alvarenga, Carlos	University of California Merced	Zhang, Ziyang	Oklahoma State University
Kallmann, Marcelo	University of California Merced	Li, Yuxuan	Oklahoma State University
W-DWs	loon onic D	Liu, Chenang	Oklahoma State University
MoBM5 Intelligent and Flexible Manufactu	Imperio B ring 1 (Regular Session)	16:05-16:25 Robotic Control of the Deformation	MoBM6.2 of Soft Linear Objects Using Deep
Chair: Nemec, Bojan	Jozef Stefan Institute	Reinforcement Learning	or Soil Linear Objects Using Deep
Co-Chair: Kovalenko, Ilya	Pennsylvania State University	Hani Daniel Zakaria, Mélodie	Institut Pascal - Université
15:45-16:05	MoBM5.1	, ,	Clermont Auvergne
Cooperative Product Agents to Impro		Aranda, Miguel	Universidad De Zaragoza
Flexibility: A Model-Based Decision I		Lequievre, Laurent	Université Clermont Auvergne - CNRS
Kovalenko, Ilya	Pennsylvania State University	Lengagne, Sebastien	Institut Pascal CNRS UMR 6602 /
Balta, Efe	University of Michigan		Université Blaise Pascal / IFMA
Tilbury, Dawn Barton, Kira	University of Michigan University of Michigan at Ann	Corrales Ramon, Juan Antonio	Universidade De Santiago De Compostela
	Arbor	Mezouar, Youcef	Clermont Auvergne INP - SIGMA
16:05-16:25	MoBM5.2		Clermont
An Adaptive, Repeatable and Rapid		16:25-16:45	MoBM6.3
a Smart Manufacturing System for S		Restricted Relevance Vector Mach	ine for Missing Data and
Wang, Zi	University of Nottingham	Application to Virtual Metrology	
Kendall, Peter	University of Nottingham	Choi, Jeongsub	West Virginia University
Gumma, Kevin	University of Nottingham	Son, Youngdoo	Dongguk University
Turner, Alison	University of Nottingham	Jeong, Myong K.	Rutgers University
Ratchev, Svetan	The University of Nottingham	16:45-17:05	MoBM6.4
16:25-16:45	MoBM5.3	Transfer Learning-Based Independ	
The AGV Battery Swapping Policy B	· ·	Zheng, Ziqian	University of Wisconsin-Madison
Lee, Min Seok	Korea Advanced Institute of Science and Technology	Liu, Kaibo	University of Wisconsin - Madison
Jang, Young Jae	Korea Advanced Institute of	17:05-17:25	MoBM6.5
	Science and Technology	An Efficient Surrogate Assisted Info Outcome with Complex Missing Me	
16:45-17:05	MoBM5.4	Park, Jaeyoung	University of Florida
Learning Skill-Based Industrial Robo	t Tasks with User Priors	Liang, Muxuan	University of Florida
Mayr, Matthias	Lund University	Zhong, Xiang	University of Florida
Hvarfner, Carl	Lund University	17:25-17:45	MoBM6.6
Chatzilygeroudis, Konstantinos	University of Patras	Multi-Level Multi-Channel Bio-Sign	
Nardi, Luigi	Stanford	Telemonitoring	ar, mary ore for Fredam.
Krueger, Volker	Lund University	Alramadeen, Wesam	University of Binghamton
17:05-17:25	MoBM5.5	Rababa, Salahaldeen	Binghamton University
A Virtual Mechanism Approach for E in Finishing Operations	xploiting Functional Redundancy	Costa, Carlos	IBM Research
Nemec, Bojan	Jozef Stefan Institute	Si, Bing	State University of New York at Binghamton
Yasuda, Ken'ichi	Yaskawa Electric Co		
Ude, Ales	Jozef Stefan Institute	MoBM7	Colonia
17:25-17:45	MoBM5.6	Learning and Adaptive Systems	
UV Grid Generation on 3D Freeform	Surfaces for Constrained	Chair: Tang, Ying Co-Chair: Perrusquia, Adolfo	Rowan University Cranfield University
Robotic Coverage Path Planning McGovern, Sean	Worcester Polytechnic Institute	15:45-16:05	MoBM7.1
Xiao, Jing	Worcester Polytechnic Institute	Performance Objective Extraction	
	(WPI)	Hippocampal Learning Approach Perrusquia, Adolfo	Cranfield University
MoBM6	Imperio C	Guo, Weisi	Cranfield University
Machine Learning and Its Applicat		· · · · · · · · · · · · · · · · · · ·	
Chair: Liu, Chenang	Oklahoma State University	16:05-16:25	MoBM7.2
Co-Chair: Si, Bing	State University of New York at	Improved Representations for Con Health Conditions through Few-Sh	

Russell, Matthew	University of Kentucky	Xiao, Li	Chinese Academy of Science
Wang, Peng	University of Kentucky	Zeliang, Zhang	Huazhong University of Science
16:25-16:45	MoBM7.3		and Technolog
A Reinforcement Learning Decen	tralized Multi-Agent Control	Jiang, Jinyang	Peking University
Approach Exploiting Cognitive Co Environments	poperation on Continuous	Peng, Yijie	Peking University
Camacho Gonzalez, Gerardo	Scuola Superiore Sant'Anna	20:00-20:20	MoCC1.4
Jesus	Couola Caperiore Cariti Willia	Using Neural Network	and Transportation Vehicle Selection
D'Avella, Salvatore	Scuola Superiore Sant'Anna	Qiu, Junyan	Shanghai Jiao Tong University
Avizzano, Carlo Alberto	Scuola Superiore Sant'Anna	Xia, Jun	Shanghai Jiao Tong University
Tripicchio, Paolo	Scuola Superiore Sant'Anna	Luo, Jun	Shanghai Jiao Tong University
16:45-17:05	MoBM7.4		Antai College of Economics & Manag
	ntrollable Latent Space from Pixels	Liu, Yang	Alibaba (China) Co., Ltd,
Wang, Weiyao	The Johns Hopkins University	Lia, rang	Hangzhou, People's Republic of
Kobilarov, Marin	Johns Hopkins University		China
Hager, Gregory	Johns Hopkins University	Liu, Yuxin	Alibaba (China) Co., Ltd, Hangzhou, People's Republic of
17:05-17:25	MoBM7.5		China
FastATDC: Fast Anomalous Traje	ectory Detection and Classification	20:20-20:40	MoCC1.5
Ni, Tianle	Technical University of Munich	A Feature Selection Algorithm Ba	
Wang, Jingwei	Tongji University	Ordinal Optimization for Regress	
Ma, Yunlong	Tongji University	Wang, Zhaojie	China Ship Research and
Wang, Shuang	Shanghai Police College		Development Academy
Liu, Min	Tongji University	Shen, Zhen	Institute of Automation, Chinese
Shen, Weiming	Huazhong University of Science and Technology	Gao, Feng	Academy of Sciences Xi'an Jiaotong University
47.05.47.45		Sun, Mu	China Ship Research and
17:25-17:45	MoBM7.6	Guri, iviu	Development Academy
Modeling and Optimization of Stu Serious Game		Li, Junda	China Ship Research and Development Academy
Hare, Ryan	Rowan University	Zhou, Qian	China Ship Research and
Tang, Ying	Rowan University		Development Academy
MoCC1	Aries 1 & 2	20:40-21:00	MoCC1.6
Simulation and Al (Chengdu) (S	Special Session)	Safety-Critical Components Anal	ysis Using Knowledge Graph for
Chair: Peng, Yijie	Peking University	CNC Machine	
Co-Chair: Xia, Li	Sun Yat-Sen University	Duan, XuHai	Zhejiang University of Technology
Organizer: Peng, Yijie	Peking University	Chen, Yong Ji, Zuzhen	Zhejiang University of Technology
19:00-19:20	MoCC1.1	Pei, Zhi	Zhejiang University of Technology Zhejiang University of Technology
Deep Reinforcement Learning-Bain Weighted Fair Queues of Route	ased Dynamic Bandwidth Allocation ers	Yi, Wenchao	Zhejiang University of Technology
Pan, Jinyan	Sun Yat-Sen University		
Chen, Gang	Guangzhou University		
Wu, Haoran	Sun Yat-Sen University	MoCC2	Aries 3
Peng, Xi	Huawei Technologies Co. Ltd		lling of Robotized Manufacturing
Xia, Li	Sun Yat-Sen University	Systems (Chengdu) (Special Se	
19:20-19:40	MoCC1.2	Chair: Wu, Naiqi	Guangdong University of Technology
Efficiency Analysis of a High-Bay BoxBay	Container Storage System	Co-Chair: Qiao, Yan	Macau University of Science and
Alexandri, Ioanna O	Northwestern Polytechnical University, School of Management	Organizer: Qiao, Yan	Technology Macau University of Science and
Yuan, Mengxue	Northwestern Polytechnical University, School of Management	Organizer: Kim, Hyun-Jung	Technology Korea Advanced Institute of Science and Technology
Zhou, Chenhao	Northwestern Polytechnical	19:00-19:20	MoCC2.1
•			
Xue, Li	University Northwestern Polytechnical University, School of Management	Design of Petri Net Supervisors f Control Specifications	for Discrete Event Systems with Two
·			for Discrete Event Systems with Two Macau University of Science and Technology

Li Zhinau	Technology Vidion University	Chen, Xinyun	Chinese University of Hong Kong, Shenzhen
Li, Zhiwu Yin, Li	Xidian University Macau University of Science and	Hong, Guiyu	Chinese University of Hong Kong, Shenzhen
	Technology	Liu, Yunan	North Carolina State University
19:20-19:40	MoCC2.2	19:40-20:00	MoCC3.3
A Novel Cyclic Scheduling App Arm-Robot Multi-Cluster Tools	proach to Time-Constrained Single-	A Point-Based Neural Network	
Wang, Jipeng	Hubei University of Technology	Prediction in Additive Manufacti	
Xue, Huan	Hubei University of Technology	Zhao, Meihua	Institute of Automation, Chinese
Yang, Qibiao	Hubei University of Technology	Viana Cana	Academy of Sciences Institute of Automation, Chinese
Pan, Chunrong	Jiangxi University of Science and Technology	Xiong, Gang	Academy of Sciences
19:40-20:00	MoCC2.3	Wang, Weixing	CASIA
	ng of High Throughput Screening	Fang, Qihang	Institute of Automation, Chinese Academy of Sciences
Wu, Naiqi	Guangdong University of Technology	Shen, Zhen	Institute of Automation, Chinese Academy of Sciences
Qiao, Yan	Macau University of Science and	Wan, Li	Beijing Ten Dimensions Technology Co.Ltd
Li, Zhiwu	Technology Xidian Univeristy	Fenghua, Zhu	Chinese Academy of Sciences, Beijing
20:00-20:20	MoCC2.4	20:00-20:20	MoCC3.4
	Petri Net Controller for Automated	Anchor-Based Detection and He	
Manufacturing Systems with U		Particle Defects on Cathodic Co	
Zhang, Ziliang	Xidian University	Sun, Chen	Huazhong University of Science
Liu, Gaiyun	Xidian University	Wan, Qian	and Technology Huazhong University of Science
Sun, Yu	Xidian University	Wali, Qiali	and Technology
20:20-20:40	MoCC2.5	Li, Zhaofu	Huazhong University of Science
Optimal Scheduling of Flexible Petri Net	Manufacturing Systems with a Timed		and Technology
Ahn, Jeongsun	KAIST	Gao, Liang	Huazhong Univ. of Sci. & Tech
Kim, Hyun-Jung	Korea Advanced Institute of	Li, Xinyu	Huazhong University of Science and Technology
	Science and Technology	Gao, Yiping	Huazhong University of Science and Technology
20:40-21:00	MoCC2.6	00.00.00.40	
Job Shops with a Timed Petri I	ines and Transport Robots in Dynamic Net	20:20-20:40	MoCC3.5 m for Office Workers Using Multimodal
Kim, Duyeon	Korea Advanced Institute of	Data	n for Onice workers osing wullimodal
·	Science and Technology	Zhang, Xiangying	Zhejiang University
Kim, Hyun-Jung	Korea Advanced Institute of Science and Technology	Zheng, Pai	The Hong Kong Polytechnic University
MoCC3	Taurus	He, Qiqi	Zhejiang University
	nd Automation 3 (Chengdu) (Regular	Peng, Tao	Zhejiang University
Session)	Ta Automation 5 (Onengau) (Negalar	Tang, Wangchujun	University of Cambridge
Chair: Peng, Tao	Zhejiang University	Ye, Hongling	Zhejiang University
Co-Chair: Shen, Zhen	Institute of Automation, Chinese Academy of Sciences	Tang, Renzhong	Zhejiang University
19:00-19:20	MoCC3.1		
Fusing Panoptic Segmentation Visual SLAM in Dynamic Envir	and Geometry Information for Robust onments	MoDC1 Smart Healthcare Services an	Aries 1 & 2 ad Systems (Chengdu) (Special
Zhu, Hu	Southern University of Science	Session)	
Vac Chan	and Technology	Chair: Song, Jie	Peking University
Yao, Chen Zhu, Zheng	SUSTech Southern University of Science	Co-Chair: Xie, Xiaolei	Tsinghua University
ZIIU, ZIIEIIY	and Technology	Organizer: Chen, Nan	Shanghai University
Liu, Zhengtao	SUSTech		Shanghai University
Jia, Zhenzhong	Southern University of Science	_	
	and Technology	_	-
Liu, Zhengtao	and Technology SUSTech Southern University of Science	Organizer: Grieff, Nam Organizer: Fei, Hongying Organizer: Ji, Ying Organizer: Song, Jie Organizer: Xie, Xiaolei	ŭ

MoCC3.2

19:20-19:40

Online Learning for Queues with Unknown Demand

Organizer: Xie, Xiaolei

Organizer: Zhong, Xiang

University of Florida

21:15-21:35	MoDC1.1		University
	g for Expanding Doctor Retrieval in	Organizer: Wang, Junfeng	Huazhong University of Science and Technology
Han, Xinming	Peking University	Organizer: Ju, Feng	Arizona State University
Song, Jie	Peking University	Organizer: Li, Yang	Northwestern Polytechnical University
21:35-21:55	MoDC1.2	Organizer: Jia, Zhiyang	Beijing Institute of Technology
	a Physician Online? a Study Based	21:15-21:35	MoDC2.1
on Tree Models and SHAP Value		Assembly State Detection Based	
Wang, Yanzhi	Peking University	Matching	a on Book Loan mig and object
Zhao, Yue	Peking University	Zhao, Shiwen	Huazhong University of Science
Song, Jie	Peking University		and Technology
Liu, Hongju	Peking University	Wang, Junfeng	Huazhong University of Science and Technology
21:55-22:15	MoDC1.3	Li, Wang	Huazhong University of Science
pp. 1645-1645.	er Clinic in the Covid-19 Pandemic ,		and Technology
Liu, Ran	Shanghai JiaoTong University	Liu, Maoding	Huazhong University of Science and Technology
Fan, Xiaoyu	Shanghai Jiaotong University	24.25.24.55	
Wu, Zerui	Shanghai Jiao Tong University	21:35-21:55	MoDC2.2
Pang, Bowen	Tsinghua University	Analysis and Improvement of Ba	
Xie, Xiaolei	Tsinghua University	Liu, Lingchen	Xi'an Jiaotong University
22:15-22:35	MoDC1.4	Yan, Chao-Bo	Xi'an Jiaotong University
Appointment Scheduling of Multip Based Optimization	ole Operating Rooms Via Sampling	21:55-22:15 Efficient and Accurate Simulation	MoDC2.3 n of Origin-Destination Flow in
Wei, Jinxiang	Tongji University	Telecommunication Systems	
Hu, Zhaolin	Tongji University	Ma, Mingsheng	Xi'an Jiaotong University
22:35-22:55	MoDC1.5	Li, Shuaipeng	Xi'an Jiaotong University
	or the Expected Opportunity Cost	Chang, Yuanlin	Xi`an Jiaotong University
Using the Regression Metamode		Zhang, Sheng	Xi'an Jiaotong University
Cao, Minhao	Southwestern University of	Li, Chenhong	Xi'an Jiaotong University
	Finance and Economics	Gong, Xu	Huawei Technologies
Xiao, Hui	Southwestern University of Finance and Economics	Huiying, Xu	Huawei Technologies Co.LTD
		Feng Gao, Feng	Xi'an Jiaotong University
22:55-23:15	MoDC1.6	Cao, Xiaoyu	Xi'an Jiaotong University
Modeling and Analysis of Operati Hospital	ing Room Workflow in a Tertiary a	Yan, Chao-Bo	Xi'an Jiaotong University
Zheng, Hanyi	Tsinghua University	22:15-22:35	MoDC2.4
Wang, Qing	Tsinghua University	A Branch and Price Based Algor Vehicles	rithm for the Valet Charging of Electric
Shen, Jiyong	Beijing Tsinghua Changgung	Zhang, Lei	Zhejiang University of Technology
	Hospital	Pei, Zhi	Zhejiang University of Technology
Kong, Yiying	Beijing Tsinghua Changgung		
Li, Jingshan	Hospital Tsinghua University		MoDC2.5 Capacitated Vehicle Routing Problem
M - D00		with Two-Dimensional Loading a	
MoDC2	Aries 3	Zhou, Shunqian	Xi'an Jiaotong University
(Special Session)	stems in the New Era 1 (Chengdu)	Wei, Junhu	Xi'an Jiaotong University
	Zhejiang University of Technology	Yan, Chao-Bo	Xi'an Jiaotong University
Chair Per 701	sjiding chirolotty of Footinology		
Chair: Pei, Zhi Co-Chair: Wang Junfeng	Huazhong University of Science		
Co-Chair: Wang, Junfeng	Huazhong University of Science and Technology	22:55-23:15	MoDC2.6
		Energy and Productivity Analysis	
Co-Chair: Wang, Junfeng	and Technology	Energy and Productivity Analysis Setups	s in Serial Production Lines with
Co-Chair: Wang, Junfeng Organizer: Zhang, Liang	and Technology University of Connecticut	Energy and Productivity Analysis	

Technical Program for Tuesday August 23, 2022

TuPL	Salon Fiestas	Chair: Lennartson, Bengt	Chalmers University of
Plenary V (Plenary Session)			Technology

08:00-09:00	TuPL.1	Lyu, Hao	Lotus Technology Ltd
Incorporating Causal Knowledge is		11:40-12:00	TuAT1.6
Sucar, Luis Enrique	Instituto Nacional de Astrafisica, Optica y Electraonica	A Nonlinear Control Approach for Improved Antiswing and Positioni	Aerial Transportation Systems with
		Liang, Xiao	Nankai University
TuAT1	Constitucion A	Lin, He	Nankai University
Advances and New Challenges		Zhang, Peng	Nankai University
Systems (Special Session)	in Logistics and Transportation	Wu, Shizhen	Nankai University
Chair: Fanti, Maria Pia	Politecnico Di Bari	Sun, Ning	Nankai University
Co-Chair: Sun, Ning	Nankai University	Fang, Yongchun	Institute of Robotics and
Organizer: Fanti, Maria Pia	Politecnico Di Bari		Automatic Information System, College
Organizer: Mangini, Agostino Marcello	Politecnico Di Bari		3333
Organizer: Robba, Michela	University of Genoa	TuAT2	Constitucion B
Organizer: Guo, Wenjing	Wuhan University of Technology	Machine Learning-Enabled Mod	leling Technology and Its
Organizer: Li, Wenfeng	Wuhan University of Technology	Applications (Special Session)	
10:00-10:20	TuAT1.1	Chair: Yang, Chunsheng	National Research Council
Robust Lane Detection and Track Rubber-Tired Gantry Cranes in a	ing for Autonomous Driving of	Co-Chair: Do, Van-Thach	Canada Nanyang Technological University
Feng, Yunjian	Southeast University	Organizer: Yang, Chunsheng	National Research Council
Li, Jun	Southeast University		Canada
		10:00-10:20	TuAT2.1
10:20-10:40	TuAT1.2	Lifetime Learning-Enabled Model	ling Framework for Digital Twin
Electric Vehicles Routing Including Energy Constraints		Yang, Chunsheng	National Research Council Canada
del Cacho Estil-les, María Asuncion	Polytechnic University of Bari	Li, Yifeng	ByteDance
Fanti, Maria Pia	Politecnico Di Bari	Saddik, Abdulmotaleb	New York University AD and
Mangini, Agostino Marcello	Politecnico Di Bari	Line 7h an a	University of Ottawa
Roccotelli, Michele	Polytechnic of Bari	Liu, Zheng	University of British Columbia
· -		Liao, Min	National Research Council Canada
10:40-11:00	TuAT1.3	10:20-10:40	TuAT2.2
A Learning-Based Iterated Local S and Sequencing Problems	Search Algorithm for Order Batching	RailTwin: A Digital Twin Framewo	ork for Railway
Zhou, Lijie	Beijing University of Chemical	Ferdousi, Rahatara	University of Ottawa
Zilou, Lijio	Technology	Laamarti, Fedwa	University of Ottawa
Lin, Chengran	Beijing University of Chemical Technology	Yang, Chunsheng	National Research Council Canada
Ma, Qian	Beijing University of Chemical	El Saddik, Abdulmotaleb	University of Ottawa
0 7	Technology	10:40-11:00	TuAT2.3
Cao, Zhengcai	Beijing University of Chemical Technology	A Weak Magnetic Detection Meth Stainless Steel	od for Surface Defects of 304
11:00-11:20	TuAT1.4	Xia, Ruiyan	Nanchang Hangkong University
AggCrack: An Aggregated Attention		Cheng, Qiangqiang	Nanchang Hangkong University
Detection in Challenging Airport R	•	Xia, Guisuo	Nanchang Hangkong University
Li, Haifeng	Civil Aviation University of China	Cheng, Dongfang	Nanchang Hangkong University
Zong, Jianping	Civil Aviation University of China	11:00-11:20	TuAT2.4
Huang, Rui	Civil Aviation University of China	An Efficient Robot Precision Asse	mbly Skill Learning Framework
Gui, Zhongcheng	Shanghai Guimu Robot Co. Ltd	Based on Several Demonstration	S,
Song, Dezhen	Texas A&M University	Ma, Yanqin	Nanjing Vocational University of
11:20-11:40 Social-Aware Decision Algorithm 1	TuAT1.5 for On-Ramp Merging Based on	Xie, Yonghua	Industry Technology Nanjing Vocational University of
Level-K Gaming	-	Zhu Masius	Industry Technology
Li, Daofei	Zhejiang University	Zhu, Wenjun	NJTECH Shanghai Tach University
Pan, Hao	Zhejiang University	Liu, Song	ShanghaiTech University
Xiao, Yang	Lotus Technology Ltd	11:20-11:40	TuAT2.5
Li, Bo	Lotus Technology Ltd	DFBVS: Deep Feature-Based Vis	
Chen, Linhui	Zhejiang University	Adrian, Nicholas	Nanyang Technological University
Li, Houjian	Zhejiang University	Do, Van-Thach	Nanyang Technological University

Pham, Quang-Cuong	NTU Singapore	Tawfick, Sameh	University of Illinois at Urbana-
11:40-12:00	TuAT2.6	Observe Clark	Champaign
Human-Like Multimodal Perception Deformable Objects	n and Purposeful Manipulation for	Shao, Chenhui	University of Illinois at Urbana- Champaign
Kaur, Upinder	Purdue University	King, William	University of Illinois Urbana- Champaign
Ma, Xin	Chinese Univerisity of HongKong	Liu, Zuozhu	Zhejiang University
Huang, Yuanmeng	Purdue University		
Voyles, Richard	Purdue University	11:20-11:40	TuAT3.5
		Digital Twin Framework for Record Caesar, Birte	Helmut-Schmidt-University,
TuAT3	Constitucion C		Institute of Automation Technology
Adaptive and Resilient Cyber-Pl (Special Session)	hysical Manufacturing Networks	Tilbury, Dawn Barton, Kira	University of Michigan University of Michigan at Ann
Chair: Wang, Hongwei	Zhejiang University		Arbor
Co-Chair: Yang, Liangjing	Zhejiang University	Fay, Alexander	Helmut-Schmidt-Universität
Organizer: Yang, Liangjing	Zhejiang University		Hamburg
Organizer: Wang, Hongwei	Zhejiang University	11:40-12:00	TuAT3.6
Organizer: Driggs-Campbell, Katie	UIUC	Seamless Interaction Design with Modes for Robust Human-Robot (
Organizer: Ferreira, Placid	University of Illinois at Urbana- Champaign	Huang, Zhe	University of Illinois at Urbana- Champaign
10:00-10:20	TuAT3.1	Mun, Ye-Ji	University of Illinois at Urbana- Champaign
Towards Cloud-Facilitated Remote Collaborative Workflow Design in		Li, Xiang	University of Illinois Urbana- Champaign
Wang, Tengyue	Zhejiang University	Xie, Yiqing	University of Illinois at Urbana-
Xiao, Songjie	Zhejiang University		Champaign
Toro Santamaria, Ricardo	University of Illinois at Urbana Champaign	Zhong, Ninghan	University of Illinois at Urbana- Champaign
Ferreira, Placid	University of Illinois at Urbana- Champaign	Liang, Weihang	University of Illinois at Urbana- Champaign
Yang, Liangjing	Zhejiang University	Geng, Junyi	Carnegie Mellon University
10:20-10:40	TuAT3.2	Chen, Tan	University of Illinois Urbana-
Knowledge Driven Technologies for Manufacturing Networks: A Review		Driggs-Campbell, Katherine	Champaign University of Illinois at Urbana-
Li, Mengxuan	Zhejiang University		Champaign
Ma, Ke	ZJU-UIUC Institute		
Chen, Haonan	University of Illinois at Urbana-	TuAT4	Imperio A
	Champaign	Advances of Machine Learning	for Smart Manufacturing (Special
Zhang, Tianqing	Zhejiang University	Session)	3(1
Wang, Tengyue	Zhejiang University	Chair: Kim, Hyun-Jung	Korea Advanced Institute of
Yang, Liangjing	Zhejiang University		Science and Technology
Driggs-Campbell, Katie	UIUC	Co-Chair: Liu, Ying	Cardiff University
Wang, Hongwei	Zhejiang University	Organizer: Liu, Ying	Cardiff University
10:40-11:00	TuAT3.3	Organizer: Li, Li	Tongji University
Universal Self-Calibrating Vision-E		Organizer: Zheng, Yu	Shanghai Jiao Tong University
Wang, Tiexin	Zhejiang University	Organizer: Lin, Kuo-Yi	Tongji University
Pu, Tanhong	Zhejiang University	Organizer: Guo, Xin	Sichuan University
Li, Haoyu	Zhejiang University	Organizer: Lu, Yuqian	The University of Auckland
Yang, Liangjing	Zhejiang University	Organizer: Wu, Dazhong	University of Central Florida
	<u> </u>	Organizer: Wang, Junliang	Donghua University
11:00-11:20 Computer Vision Aided Hidden De	TuAT3.4 efects Detection in Additively	Organizer: Chen, Chong	Guangdong University of Technology
Manufactured Parts	7	10:00-10:20	TuAT4.1
Hu, Tianxiang	ZJU-UIUC Institute, Zhejiang University	Imbalanced Wafer Map Dataset C Learning Method and Optimized L	Classification with Semi-Supervised
Bimrose, Miles	University of Illinois Urbana- Champaign	Huang, Jianchuan	Tongji University
McGregor, Davis	University of Illinois Urbana-	Lin, Kuo-Yi	Tongji University
	Champaign	Xu, Jia	Tongji University
Wang, Jiongxin	The University of Manchester	Li, Li	Tongji University
rrang, crengan	The differency of Marienester	Li, Li	rongji oniversity

10:20-10:40	TuAT4.2	Bierbuesse, Jan	FernUniversitaet in Hagen
Understanding Context of Use from	m Online Customer Reviews Using	Moench, Lars	University of Hagen
BERT		10:20-10:40	TuAT5.2
Tong, Yanzhang	Cardiff University		ng of Production System: A Case Study
Liang, Yan	Expert IT Services	at a Small/medium-Sized Ma	
Liu, Ying	Cardiff University	Sun, Yuting	University of Connecticut
Spasic, Irena	Cardiff University	Zhang, Liang	University of Connecticut
Hicks, Yulia	Cardiff University, Cardiff School of Engineering	10:40-11:00	TuAT5.3
10:40-11:00		Detection and Correction of E Machine Bernoulli Serial Line	Buffer Occupancy Data Error in Two-
Cross-Domain Fault Diagnosis Via		Zhu, Tianyu	University of Connecticut
Generalization	3	Zhang, Liang	University of Connecticut
Yue, Fengyu	University of Science and	11:00-11:20	TuAT5.4
	Technology of China	-	Production Control with Different
Wang, Yong	University of Science and Technology of China	Classes of Residence Time	
11:00-11:20	TuAT4.4	Wang, Feifan	Mayo Clinic
Attention-Based Representation L		Ju, Feng	Arizona State University
Principal and Residual Space Mor		11:20-11:40	TuAT5.5
Wang, Botao	Hong Kong University of Science		Robot Collaboration Based on
	and Technology	Reinforcement Learning	
Tsung, Fugee	HKUST	Yu, Tian	University of Virginia
Yan, Hao	Arizona State University	Chang, Qing	University of Virginia
11:20-11:40	TuAT4.5	11:40-12:00	TuAT5.6
Evolution Mechanism Analysis and Process Based on Minimum Entro	d Stability Evaluation of Machining ppy Space State	An Adaptive Method for Flex Tools: Modeling and Schedu	ible Configurations of Single-Arm Cluster ling
Li, Bohao	Xi'an Jiaotong University	Xiong, Wenqing	Macau University of Science and
Zhao, Liping	Xi'an Jiaotong University		Technology
Yao, Yiyong	XJTU University	Qiao, Yan	Macau University of Science and
Zhi, Yinqing	Xi'an Jiaotong University	Poi Lining	Technology Guangdong University of
		Bai, Liping	Technology
		Huang, Baoying	Macau University of Science and
11:40-12:00	TuAT4.6		Technology
	Scheduling of Robotic Flow Shops	Wu, Naiqi	Guangdong University of Technology
Lee, Jun-Ho	Chungnam National University	Zhang, Siwei	Macau University of Science and
Kim, Hyun-Jung	Korea Advanced Institute of	Zhang, Giwei	Technology
	Science and Technology		
TuAT5	Imporio D	TuAT6	Imperio C
	Imperio B	Manufacturing Data Science	
Manufacturing and Service Syst Session)	terns in the New Era 2 (Special	Chair: Lee, Chia-Yen	National Taiwan University
Chair: Ju, Feng	Arizona State University	Co-Chair: Choi, Jeongsub	
Co-Chair: Zhang, Liang	University of Connecticut	Organizer: Lee, Chia-Yen	-
Organizer: Zhang, Liang	University of Connecticut	Organizer: Hsu, Chia-Yu	National Taipei University of Technology
Organizer: Yan, Chao-Bo	Xi'an Jiaotong University	Organizer: Lin, Kuo-Ping	Tunghai University
Organizer: Pei, Zhi	Zhejiang University of Technology		
Organizer: Wang, Jun-Qiang	Northwestern Polytechnical	10:00-10:20	TuAT6.1
	University	Metaheuristic and Reinforcer Optimization in the Petrocher	•
Organizer: Wang, Junfeng	Huazhong University of Science and Technology	Lee, Chia-Yen	National Taiwan University
Organizer: Ju, Feng	Arizona State University	Ho, Chieh-Ying	National Cheng Kung University
Organizer: Li, Yang	Northwestern Polytechnical	Hung, Yu-Hsin	National Taiwan University
organizor. E., Tang	University	Deng, Yu-Wen	National Cheng Kung University
Organizer: Jia, Zhiyang	Beijing Institute of Technology	10:20-10:40	TuAT6.2
10:00-10:20	TuAT5.1		s for Overlay Error Compensation in
Scheduling Approach for the Asse	embly of an Airplane with Multiple	Semiconductor Manufacturin	g National Tainai University of

Hsu, Chia-Yu

Scheduling Approach for the Assembly of an Airplane with Multiple Modes, Generalized Temporal Constraints, and a Break Calendar

National Taipei University of

	Technology	Xiong, Zhenhua	Shanghai Jiao Tong University
Yao, Ying-Chu	National Taipei University of Technology	11:40-12:00	TuAT7.6
10:40-11:00	TuAT6.3	Dynamics Modeling and Verifica Based on Cosserat Rod Theory	tion of Parallel Extensible Soft Robot
The Price of Nickel Prediction Usin	g Hybrid Deep Learning Model in	Wang, Xiaocheng	Tsinghua University
Steel Manufacturers Lin, Kuo-Ping	Tunghai University	Wang, Changliang	Shanghai Academy of Spaceflight Technology
11:00-11:20	TuAT6.4	Wang, Xueqian	Center for Artificial Intelligence and Robotics, Graduate School
On Job Shop Scheduling with Rest Manufacturers	ricted Set-Up Time in Steel	Meng, Deshan	Sun Yat-Sen University
Lin, Kuo-Ping	Tunghai University	Liang, Bin	Tsinghua University
11:20-11:40	TuAT6.5	Xu, Hejie	Tsinghua Shenzhen International
Exploration on Industrial System-A Manufacturing			Graduate School
Wang, Yanying	Beihang University	TuBT1	Constitucion A
Cheng, Ying	Beihang University	Motion and Robot Control 2 (R	legular Session)
Zhu, Yuanzhe	Beihang University	Chair: Yu, Wen	CINVESTAV-IPN
Tao, Fei	Beihang University	Co-Chair: Saeedi, Sajad	Toronto Metropolitan University
11:40-12:00	TuAT6.6	13:30-13:50	TuBT1.1
Optimising the Supply and Demand Manufacturing Based on Stackelbe	d Decisions in High-End Equipment erg Game.	Adaptive Control Methodology for Speed Tracking Implementation	or a Class of Nonlinear Systems with for a BLDC Motor
Han, Tiaojuan	Tongji University	Gil Bayardo, Raul	CINVESTAV- IPN
Lu, Jianfeng	Tongji University	Loukianov, Alexander G.	CINVESTAV- IPN
Zhang, Hao	Tongji University	Sanchez, Edgar N.	CINVESTAV- IPN
		13:50-14:10	TuBT1.2
TuAT7	Colonia	Online Modeling and Control of S	Soft Multi-Fingered Grippers Via
Manipulation Planning and Cont	rol (Regular Session)	Koopman Operator Theory	Haring mailter of Oalife mails - Discounties
Chair: Xiong, Zhenhua	Shanghai Jiao Tong University	Shi, Lu Mucchiani, Caio	University of California, Riverside University of California Riverside
Co-Chair: Vatsal, Vighnesh	Tata Consultancy Services	Karydis, Konstantinos	University of California, Riverside
10:00-10:20	TuAT7.1	raryaio, renotariineo	Criversity of Camernia, reverside
Rotational Slippage Minimization in	Object Manipulation	14:10-14:30	TuBT1.3
Hu, Jiaming	UC San Diego	Real-Time Sliding Mode Fault Di	
Christensen, Henrik Iskov	UC San Diego	Omnidirectional Mobile Robot	agricolo for a frii de vivil delea
10:20-10:40	TuAT7.2	Lizarraga, Adrian	Cinvestav
Augmenting Vision-Based Grasp P	lans for Soft Robotic Grippers	Begovich, Ofelia	CINVESTAV - Gdl
Using Reinforcement Learning	Tata Camaultanau Camiaaa	Ramirez, Antonio	Cinvestav
Vatsal, Vighnesh George, Nijil	Tata Consultancy Services TCS Research & Innovation	14:30-14:50	TuBT1.4
		Posture Stabilization Control for	a Quadruped Robot Walking on
10:40-11:00	TuAT7.3	Swaying Platforms Li, Jiayi	Tainghua University
Manipulation of Deformable Linear Spaces	•	Ye, Linqi	Tsinghua University Tsinghua University Graduate
Chang, Peng	Northeastern University		School at Shenzhen
Luo, Rui	Northeastern University	Jin, Zongxiang	Shanghai Academy of Spaceflight Technology
Zolotas, Mark Padir, Taskin	Northeastern University Northeastern University	Liu, Houde	Shenzhen Graduate School,
11:00-11:20	TuAT7.4		Tsinghua University
Reducing Time in Active Visual Tai		Liang, Bin	Tsinghua University
Optimization for Robotic Manipulat		14:50-15:10	TuBT1.5
Kittaka, Tatsuya	YASKAWA Electric Corporation	Dual-Arm Robot	tive Manufacturing System Based on
11:20-11:40	TuAT7.5	Kornmaneesang, Woraphrut	National Chung Cheng University
Motion Planning of Multi-Robots Of	bject Transport with Deformable	Chen, Shyh-Leh	National Chung Cheng Univeristy
Sheet Hu, Jiawei	Shanghai liao Tong University	Boonto, Sudchai	KMUTT
ни, Jiawei Liu, Wenhang	Shanghai Jiao Tong University Shanghai Jiao Tong University	15:10-15:30	TuBT1.6
Zhang Heng	Shanghai Jiao Tong University	Deep Direct Visual Servoing of T	endon-Driven Continuum Robots

Shanghai Jiao Tong University

Rutgers University

Zhang, Heng

Yi, Jingang

Ryerson University

Deep Direct Visual Servoing of Tendon-Driven Continuum Robots

Abdulhafiz, Ibrahim

Nazari, Ali A.	roronto ivietropolitan University
Abbasi-Hashemi, Taha	Ryerson Universigy
Jalali, Amir	Ryerson University
Zareinia, Kourosh	Ryerson University
Saeedi, Sajad	Toronto Metropolitan University
Janabi-Sharifi, Farrokh	Ryerson University
uBT2	Constitucion B
Recent Advances in Theory ar Based Optimization (Special Se	nd Applications of Simulation- ession)
Chair: Shi, Zhongshun	University of Tennessee Knoxville
Co-Chair: Jin, Xiao	National University of Singapore
Organizer: Gao, Siyang	City University of Hong Kong
Organizer: Chen, Weiwei	Rutgers University
13:30-13:50	TuBT2.1
Convergence Rate Analysis of the Allocation Algorithm	
Li, Yanwen	City University of Hong Kong
Gao, Siyang	City University of Hong Kong
Shi, Zhongshun	University of Tennessee Knoxville
13:50-14:10	TuBT2.2
An Efficient Bi-Fidelity Method fo	r Continuous Simulation Optimization
Wang, Gengchen	Northeastern University
Jin, Xiao	National University of Singapore
Lee, Loo Hay	National University of Singapore
14:10-14:30	TuBT2.3
A Simulation Optimization-Aided Automation of Scheduling Rules	Learning Method for Design
Ma, Hang	University of Tennessee, Knoxville
Zhang, Cheng	University of Tennessee, Knoxville
Shi, Zhongshun	University of Tennessee Knoxville
14:30-14:50	TuBT2.4
Monitoring Portfolio Risk Via Like	
Shi, Jiangnan	Harbin Institute of Technology
Jiang, Guangxin	Harbin Institute of Technology
14:50-15:10	TuBT2.5
Comprehensive Review of Intelli Building	gent Modeling and Control of Smart
Diego, Peredo	CINVESTAV-IPN
Yu, Wen	CINVESTAV-IPN
ГиВТ3	Constitucion C
Knowledge Representation an Agents (Special Session)	d Reasoning for Autonomous
Chair: Jia, Yunyi	Clemson University
Co-Chair: Liu, Wenxin	Lehigh University
Organizer: Sun, Yu	University of South Florida
Organizer: Jia, Yunyi	Clemson University
Organizer: Paulius Ramos, David	Brown University
13:30-13:50	TuBT3.1
Hybrid Approach for Anticipating Intelligence Environments	
Moulouel, Koussaila	University Paris Est Créteil -UPEC
Chibani, Abdelghani	
	Lissi Lab Paris EST University
Abdelkawy, Hazem	Lissi Lab Paris EST University of LISSI Laboratory, University of

Toronto Metropolitan University

Nazari, Ali A.

	B 1 = 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
A	Paris-Est Creteil (UPEC)
Amirat, Yacine	University of Paris Est Créteil (UPEC)
13:50-14:10	TuBT3.2
Robot Learning of Assembly Task Using Functional Object-Oriented	ks from Non-Expert Demonstrations I Network
Chen, Yi	Clemson University
Paulius Ramos, David	Brown University
Sun, Yu	University of South Florida
Jia, Yunyi	Clemson University
14:10-14:30	TuBT3.3
Context-Dependent Anomaly Det Embedding Models	ection with Knowledge Graph
Vaska, Nathan	MIT Lincoln Laboratory
Leahy, Kevin	MIT Lincoln Laboratory
Helus, Victoria	MIT Lincoln Laboratory
14:30-14:50	TuBT3.4
Knowledge Graph-Based Approa Information of Decommissioned E	
Ma, Longzhou	University of Science and Technology Beijing
Wu, Xiuli	University of Science and Technology Beijing
Kuang, Yuan	University of Science and Technology Beijing
Tang, Ying	University of Science and Technology Beijing
Xiang, Dong	University of Science and Technology Beijing
14:50-15:10	TuBT3.5
Wind Energy Forecasting Using N	
Li, Xiaoou	Center of Research and Advanced Studies of NationalPolytechnic I
Sabas, Juan Francisco	CINVESTAV
Duarte Méndez, Vicente Adnan	CINVESTAV
15:10-15:30	TuBT3.6
Theoretical and Experimental Stu	idies on Microgrid Control
Liu, Wenxin	Lehigh University
TuBT4	Imperio A
Motion and Path Planning and	Control 3 (Regular Session)
Chair: Prakash, Ravi	TU Delft
Co-Chair: Dutta, Ayan	University of North Florida
13:30-13:50	TuBT4.1
Threat-Aware Selection for Targe	t Engagement
Biediger, Daniel	University of Houston
Becker, Aaron	University of Houston
13:50-14:10	TuBT4.2
Closed Form HJB Solution for Pa with Warehousing Applications	th Planning of a Robot Manipulator
Prakash, Ravi	TU Delft
Mohanta, Jayant Kumar	Assistant Professor, IIT Jodhpur
Behera, Laxmidhar	IITK
14:10-14:30	TuBT4.3
	Aware Tour Planning for a Mobile
Robot	

Ghosh, Anirban	University of North Florida	Salapaka, Srinivasa M	University of Illinois at Urbana-
Dutta, Ayan	University of North Florida		Champaign
Sotolongo, Brian	UNF	14:50-15:10	TuBT5.5
14:30-14:50	TuBT4.4	A MIP-Based Approach for Multi- Planning	Robot Geometric Task-And-Motion
Simulation Aided Anticipatory (Congestion Avoidance for Warehouses	Zhang, Hejia	University of Southern California
Bhati, Hardik	IIITA	Chan, Shao-Hung	University of Southern California
Suri, Garvit	Indian Institute of Information	Zhong, Jie	University of Southern California
Kala Dahul	Technology , Allahabad Indian Institute of Information	Li, Jiaoyang	University of Southern California
Kala, Rahul	Technology, Allahabad, India	Koenig, Sven	University of Southern California
Nandi, Gora Chand	IIIT, Allahabad	Nikolaidis, Stefanos	University of Southern California
14:50-15:10	TuBT4.5	15:10-15:30	TuBT5.6
	Approach for Trajectory Planning in a		nning for Quadrupedal and Wheeled
Safe and Ergonomic Human-R		Robot Teaming	g .c. Quanapeaa. aaco.ca
Proia, Silvia	Politecnico Di Bari	Zhou, Ziyi	Georgia Institute of Technology
Cavone, Graziana	University of Roma Tre	Lee, Dong Jae	Georgia Institute of Technology
Carli, Raffaele	Politecnico Di Bari	Yoshinaga, Yuki	Georgia Institute of Technology
Dotoli, Mariagrazia	Politecnico Di Bari	Balakirsky, Stephen	Georgia Tech
15:10-15:30	TuBT4.6	Guo, Dejun	UBTECH North America R&D
Safe Motion Planning for a Mol	bile Robot Navigating in Environments	7	Center
Shared with Humans		Zhao, Ye	Georgia Institute of Technology
Sakcak, Basak	University of Oulu		
Bascetta, Luca	Politecnico Di Milano	TuBT6	Imperio C
		Al-Based Methods (Regular Ses	ssion)
TuBT5	Imperio B	Chair: Yao, Bing	Oklahoma State University
	pordination 3 (Regular Session)	Co-Chair: Ramirez, Antonio	Cinvestav
Chair: Yan, Bing	Rochester Institute of Technology	13:30-13:50	TuBT6.1
Co-Chair: Zhao, Ye	Georgia Institute of Technology	Multi-Branching Neural Network f	or Myocardial Infarction Prediction
	•	Wang, Zekai	Oklahoma State University
13:30-13:50	TuBT5.1	Liu, Chenang	Oklahoma State University
Accounting for Preemption and	Migration Costs in the Calculation of	Yao, Bing	Oklahoma State University
Hard Real-Time Cyclic Executive			
Rubio, Laura Elena	CINVESTAV- IPN	13:50-14:10	TuBT6.2
Briz, José Luis	Universidad De Zaragoza	CIPCaD-Bench: Continuous Indu	
Ramirez, Antonio	CINVESTAV- IPN	Benchmarking Causal Discovery	
13:50-14:10	TuBT5.2	Menegozzo, Giovanni	University of Verona
	hm for Parallel Machine Scheduling	Dall'Alba, Diego	University of Verona
Problem with Hard Q-Times an	•	Fiorini, Paolo	University of Verona
Wang, Chaoran Shi, Leyuan	Univ. of Wisconsin-Madison Univ. of Wisconsin-Madison	14:10-14:30	TuBT6.3
· · · · · · · · · · · · · · · · · · ·	-	Performance Evaluation of AI Alg Devices for Manufacturing	orithms on Heterogeneous Edge
14:10-14:30	TuBT5.3	Rupprecht, Bernhard	Technical University of Munich
Service, pp. 2035-2041.	Multi-Class Mobility-On-Demand	Hujo, Dominik	Technical University of Munich
Shrivastava, Niharika	Indian Institute of Information	Vogel-Heuser, Birgit	Technical University Munich
Omivastava, Milanka	Technology, Allahabad		•
Meghjani, Malika	Singapore University of	14:30-14:50	TuBT6.4
	Technology and Design	Data Uncertainty Learning for Sin	
14:30-14:50	TuBT5.4	Hu, Zhiqiang	KYOCERA Corporation
A Parameterized Sequential De	ecision Approach to Job-Shop	Arata, Koji	KYOCERA Corporation Minatomirai Research Center
Scheduling		Mikuni, Yoshitaka	Kyocera
Srivastava, Amber	ETH Zurich	14:50-15:10	TuBT6.5
Basiri, Salar	University of Illinois at Urbana- Champaign	Skill Transfer for Surface Finishin	g Tasks Based on Estimation of Key
Kapadia, Mustafa	University of Illinois at Urbana-	Parameters Vim Vitable	University of Court and Down
Francisco Div. 11	Champaign	Kim, Yitaek	University of Southern Denmark
Ferreira, Placid	University of Illinois at Urbana- Champaign	Sloth, Christoffer	University of Southern Denmark
	Champaign	Kramberger, Aljaz	University of Southern Denmark

15:10-15:30	TuBT6.6	Chair: Scherzinger, Stefan	FZI Research Center for
Directed Explorations During Flo	od Disasters Using Multi-UAV	Co Chair: Adalaya Akanimah	Information Technology
System		Co-Chair: Adeleye, Akanimoh	University of California, San Diego
Garg, Armaan	Indian Institute of Technology Ropar	15:45-16:05	TuCT1.1
Jha, Shashi Shekhar	Indian Institute of Technology Ropar	Educate Complex C Programming Mechanical Engineers Freshmen	– Array, Pointer, Loop
	Пораг	Vogel-Heuser, Birgit	Technical University Munich
		Land, Kathrin Sophie	Technical University of Munich
TuBT7	Colonia	Hujo, Dominik	Technical University of Munich
Manufacturing, Maintenance a Session)	nd Supply Chains (Regular	Krüger, Marius	Technical University of Munich
Chair: Choi, Jeongsub	West Virginia University	16:05-16:25	TuCT1.2
Co-Chair: Yue, Xiaowei	Virginia Tech		apable Robotic Control Using ROS2
13:30-13:50	TuBT7.1	Plasberg, Carsten	FZI Forschungszentrum Informatik
Integrated Process-System Mod	eling and Performance Analysis for	Hendrik, Nessau	FZI Forschungszentrum Informatik
Serial Production Lines		Timmermann, David	FZI Forschungszentrum Informatik
Li, Chen	University of Virginia	Eichmann, Christian	FZI Research Center for Information Technology
Chang, Qing	University of Virginia	Roennau, Arne	FZI Forschungszentrum
Xiao, Guoxian	General Motors Corporation	Roeillau, Airie	Informatik, Karlsruhe
Arinez, Jorge	General Motors Research & Development Center	Dillmann, Rüdiger	FZI - Forschungszentrum Informatik - Karlsruhe
13:50-14:10	TuBT7.2	16:25-16:45	TuCT1.3
Dynamic Robot Assignment for F	Flexible Serial Production Systems		tem to Support Domain Experts in
Bhatta, Kshitij	University of Virginia	Programming Low-Code to Lever	
Huang, Jing	University of Virginia	Neumann, Eva-Maria	Technical University of Munich
Chang, Qing	University of Virginia	Vogel-Heuser, Birgit	Technical University Munich
14:10-14:30	TuBT7.3	Haben, Fabian	Technical University of Munich
Stress-Aware Optimal Placemen	t of Actuators for Ultra-High	Krüger, Marius	Technical University of Munich
Precision Quality Control of Com		Wieringa, Timotheus	HAWE Hydraulik SE
AlBahar, Areej	Virginia Polytechnic Institute and State University	16:45-17:05	TuCT1.4
Kim, Inyoung	Virginia Polytechnic Institute and	Putting Away the Groceries with F	
	State University	Adeleye, Akanimoh	University of California, San Diego UC San Diego
Lutz, Tim	Virginia Polytechnic Institute and State University	Hu, Jiaming Christensen, Henrik	-
Yue, Xiaowei	Virginia Tech		University of California, San Diego
14:30-14:50	TuBT7.4	17:05-17:25	TuCT1.5
Suboptimal Decision Tree with E	ixplainable Features for Machining	Design of a Conveyor Belt Manipu	·
Outcome Estimation Hsu, Chih-Hua	Chung Yuan Christian University	Yumbla, Francisco	ESPOL Polytechnic University
Yang, Haw-Ching	National Kaohsiung Univ. of Sci.	Medrano Yax, Juan Fernando	Sungkyunkwan University
	and Tech	Valarezo Añazco, Edwin	Escuela Superior Politecnica Del Litoral
14:50-15:10	TuBT7.5	Jung, Hong-ryul	Sungkyunkwan University
Smart E-Waste Marketplace: Ma	tching Experiments, pp. 2134-2137.	Luong, Tuan	Sungkyunkwan University
Sarukkai, Arya	Stopewaste.org/Redwood Middle	Seo, Sungwon	SungkyunKwan University
	School	Shin, Jinjae	Sungkyunkwan University
15:10-15:30	TuBT7.6	Moon, Hyungpil	Sungkyunkwan University
Golden Path Search Algorithm fo		17:25-17:45	TuCT1.6
Ing, Ching Kang	National Tsing Hua University	A Walking Space Robot for On-O	rbit Satellite Servicing: The
Lin, Chin-Yi	National Cheng Kung University	ReCoBot Otofor	E71.D
Hsieh, Yu-Ming	National Cheng Kung University, Institute of Manufacturing Infor	Scherzinger, Stefan	FZI Research Center for Information Technology
Peng, Po Hsiang	National Tsing Hua University	Weinland, Jakob	FZI Research Center for
Cheng, Fan-Tien	National Cheng Kung University	Wilhrandt Dahart	Information Technology
		Wilbrandt, Robert	FZI Forschungszentrum Informatik FZI Forschungszentrum Informatik
TuCT1	Constitucion A	Becker, Pascal Roennau, Arne	FZI Forschungszentrum informatik FZI Forschungszentrum
	vice Robotics (Regular Session)	Noeiliau, Airie	Informatik, Karlsruhe

Collaborative Robots III Mailula	cturing (Regular Session)
Chair: Lennartson, Bengt	Chalmers University o
	Technology
Co-Chair: Salt Ducaju, Julian Mauricio	LTH, Lund University
15:45-16:05	TuCT2.1
Replicating Human Skill for Roboti	ic Deep-Micro-Hole Drilling
Maric, Bruno	Univeristy of Zagreb, Faculty of Electrical Engineering and Comp
Petric, Frano	University of Zagreb, Faculty of Electrical Engineering and Comp
Stuhne, Dario	Faculty of Electrical Engineering and Computing, University of Z
Ranogajec, Vanja	OMCO Croatia D.o.o
Orsag, Matko	University of Zagreb, Faculty of Electrical Engineering and Comp
16:05-16:25	TuCT2.2
Global Safety Characteristics of W	heeled Mobile Manipulators
Mansfeld, Nico	Technical University of Munich
Gómez Peña, Guillermo	Franka Emika GmbH
Hamad, Mazin	Technical University of Munich (TUM
Kurdas, Alexander Andreas	Technical University of Munich
Abdolshah, Saeed	Technical University of Munich
Haddadin, Sami	Technical University of Munich
16:25-16:45	TuCT2.3
Sizing of a Fleet of Cooperative ar Transport of Heterogeneous Load	
Chaikovskaia, Mari	LIMOS, INP Clermont Auvergne
Gayon, Jean-Philippe	LIMOS, INP Clermont Auvergne
Marjollet, Mairtin	ISIMA, INP Clermont-Augergne
16:45-17:05	TuCT2.4
	ation for Safe Kinesthetic Teaching tions
Using Safety Control Barrier Funct	tions
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio	tions LTH, Lund University
Using Safety Control Barrier Funct	tions LTH, Lund University Lund University
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio Olofsson, Bjorn	tions LTH, Lund University Lund University LTH, Lund University
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio Olofsson, Bjorn Robertsson, Anders Johansson, Rolf	tions LTH, Lund University Lund University LTH, Lund University Lund University
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio Olofsson, Bjorn Robertsson, Anders Johansson, Rolf 17:05-17:25	tions LTH, Lund University Lund University LTH, Lund University Lund University TuCT2.5
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio Olofsson, Bjorn Robertsson, Anders Johansson, Rolf 17:05-17:25 A Passivity-Based Adaptive Admit	tions LTH, Lund University Lund University LTH, Lund University Lund University TuCT2.5 tance Control Strategy for Physical s-On Tasks
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio Olofsson, Bjorn Robertsson, Anders Johansson, Rolf 17:05-17:25 A Passivity-Based Adaptive Admit Human-Robot Interaction in Hands Bascetta, Luca	tions LTH, Lund University Lund University LTH, Lund University Lund University TuCT2.stance Control Strategy for Physical s-On Tasks Politecnico Di Milano
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio Olofsson, Bjorn Robertsson, Anders Johansson, Rolf 17:05-17:25 A Passivity-Based Adaptive Admit Human-Robot Interaction in Hands Bascetta, Luca 17:25-17:45 Relevant Safety Falsification by Au	LTH, Lund University Lund University LTH, Lund University LTH, Lund University Lund University TuCT2.5 tance Control Strategy for Physical s-On Tasks Politecnico Di Milano
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio Olofsson, Bjorn Robertsson, Anders Johansson, Rolf 17:05-17:25 A Passivity-Based Adaptive Admit Human-Robot Interaction in Hands Bascetta, Luca 17:25-17:45	LTH, Lund University Lund University LTH, Lund University Lund University Lund University TuCT2.5 tance Control Strategy for Physical s-On Tasks Politecnico Di Milano TuCT2.6 utomata Constrained Chalmers University of
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio Olofsson, Bjorn Robertsson, Anders Johansson, Rolf 17:05-17:25 A Passivity-Based Adaptive Admit Human-Robot Interaction in Hands Bascetta, Luca 17:25-17:45 Relevant Safety Falsification by At Reinforcement Learning Cronrath, Constantin	LTH, Lund University Lund University LTH, Lund University LTH, Lund University Lund University TuCT2.5 tance Control Strategy for Physical s-On Tasks Politecnico Di Milano
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio Olofsson, Bjorn Robertsson, Anders Johansson, Rolf 17:05-17:25 A Passivity-Based Adaptive Admit Human-Robot Interaction in Hands Bascetta, Luca 17:25-17:45 Relevant Safety Falsification by At Reinforcement Learning Cronrath, Constantin Huck, Tom Philip	LTH, Lund University Lund University LTH, Lund University Lund University Lund University TuCT2.5 tance Control Strategy for Physical s-On Tasks Politecnico Di Milano TuCT2.6 utomata Constrained Chalmers University o
Using Safety Control Barrier Funct Salt Ducaju, Julian Mauricio Olofsson, Bjorn Robertsson, Anders Johansson, Rolf 17:05-17:25 A Passivity-Based Adaptive Admit Human-Robot Interaction in Hands Bascetta, Luca 17:25-17:45 Relevant Safety Falsification by At Reinforcement Learning Cronrath, Constantin	LTH, Lund University Lund University LTH, Lund University Lund University Lund University TuCT2.5 tance Control Strategy for Physical s-On Tasks Politecnico Di Milano TuCT2.6 utomata Constrained Chalmers University or Technology Karlsruhe Institute of Technology

TuCT3	Constitucion C
Factory Automation (Regular Session	on)
Chair: Lu, Yuqian	The University of Auckland
Co-Chair: Moench, Lars	University of Hagen
15:45-16:05	TuCT3.1
An Autonomous Mobile Robot for Qua	ality Assurance of Car Body
Karl, Matthias	Carl Zeiss AG
Forstenhäusler, Marc	Ulm University
Nguyen-Cong, Trinh	Carl Zeiss AG
Dietmayer, Klaus	University of Ulm
Glasenapp, Carsten	Carl Zeiss AG
16:05-16:25	TuCT3.2
Programming Abstractions for Simula Manufacturing Systems	ation and Testing on Smart
Hsieh, Chiao	University of Illinois at Urbana- Champaign
Wu, Daniel	University of Illinois at Urbana- Champaign
Koh, Yubin	University of Illinois at Urbana- Champaign
Mitra, Sayan	University of Ilinois, Urbana Champagne
16:25-16:45	TuCT3.3
Decentralizing Decision-Making for P	
in Semiconductor Manufacturing	
Carlos A Leca Perez, Carlos Leca	North Carolina State University
Karl Kempf, Karl Kempf	Intel
Uzsoy, Reha	North Carolina State University
16:45-17:05	TuCT3.4
Learning Dispatching Rules for a Sing Batch Scheduling Problem	gle-Machine Energy-Aware
Schorn, Daniel	University of Hagen
Moench, Lars	University of Hagen
17:05-17:25	TuCT3.5
Trajectory Tracking Kinematic Contro Robots Via Active Disturbance Reject Mechanism	
Ramirez-Neria, Mario	Universidad Iberoamericana
Luviano-Juarez, Alberto	UPIITA - IPN México
Madonski, Rafal	Jinan University
Hernandez-Martinez, Eduardo Gamaliel	Universidad Iberoamericana Ciudad De México
Fernandez-Anaya, Guillermo	Universidad Iberoamericana
Lozada-Castillo, Norma	Sepi Upiita Ipn
17:25-17:45	TuCT3.6
Deep Learning Based Litter Identifica Using Self-Reconfigurable Pavement	
	on coping reads:
Felix, Braulio	SUTD
	SUTD Singapore University of
Felix, Braulio	SUTD
Felix, Braulio Lim, Yi	SUTD Singapore University of Technology and Design Singapore University of
Felix, Braulio Lim, Yi Ramalingam, Balakrishnan	SUTD Singapore University of Technology and Design Singapore University of Technology and Design Delhi Technological University Singapore University of
Felix, Braulio Lim, Yi Ramalingam, Balakrishnan Rayguru, Madan Mohan	SUTD Singapore University of Technology and Design Singapore University of Technology and Design Delhi Technological University Singapore University of Technology and Design Singapore University of
Felix, Braulio Lim, Yi Ramalingam, Balakrishnan Rayguru, Madan Mohan Hayat, Abdullah Aamir	SUTD Singapore University of Technology and Design Singapore University of Technology and Design Delhi Technological University Singapore University of Technology and Design

Elara, Mohan Rajesh	Technology and Design Singapore University of Technology and Design

TuCT4	Imperio A		
Motion and Path Planning and Control 4 (Regular Session)			
Chair: Selvaggio, Mario	Università Degli Studi Di Napoli Federico II		
Co-Chair: Yi, Jingang	Rutgers University		
15:45-16:05	TuCT4.1		
Bio-Inspired Obstacle Avoidance Us Analysis	sing Wavelet-Based Element		
Ahmad, Shakeeb	University of Colorado - Boulder		
Turin, Zoe	University of Colorado Boulder		
Humbert, James Sean	University of Colorado Boulder		
16:05-16:25	TuCT4.2		
E ³ MoP: Efficient Motic Guided Motion Primitives Pruning a Banded Structure			
Wen, Jian	Nankai University		
Zhang, Xuebo	Nankai University,		
Gao, Haiming	Zhejiang Lab		
Yuan, Jing	College of Computer and Control Engineering, Nankai University		
Fang, Yongchun	Institute of Robotics and Automatic Information System, College		

16:25-16:45	TuCT4.3
Dual-Arm Object Transportation External Disturbance Estimation	Via Model Predictive Control and
Lei, Maolin	Humanoids and Human Centered Mechatronics (HHCM) Research Line O
Selvaggio, Mario	Università Degli Studi Di Napoli Federico II
Wang, Ting	Robotics Lab., Shenyang Institute of Automation, CAS
Ruggiero, Fabio	Università Di Napoli Federico II
Zhou, Cheng	Tencent
Yao, Chen	Shenyang Institute of Automation, Chinese Academy of Sciences
Zheng, Yu	Tencent
16:45-17:05	TuCT4.4
Constrained Time-Optimal Adapt Using an Indirect Method	tive Robust Control of Linear Motors
Liu, Yingqiang	State Key Laboratory of Fluid Power and Mechatronic Systems, Zhe
Chen, Zheng	Zhejiang University
Yao, Bin	Zhejiang University
17:05-17:25	TuCT4.5
Motion Control of an Autonomous	s Wheel-Leg Bikebot
Huang, Xinyan	Zhejiang University
Han, Feng	Rutgers University
Han, Yi	Kochi University of Technology
Wang, Shuoyu	Kochi University of Technology
Liu, Tao	Zhejiang University

Yi, Jingang	Rutgers University
17:25-17:45	TuCT4.6
Leveraging Distributional Bias fo Uncertainty: A Kernel Embeddin	or Reactive Collision Avoidance under g Approach
Gupta, Anish	International Institute of Information Technology, Hyderabad
Singh, Arun Kumar	University of Tartu
Krishna, Madhava	IIIT Hyderabad
TuCT5 Intelligent and Flexible Manufa	Imperio B acturing 2 (Regular Session)
Chair: Fraccaroli, Enrico	University of North Carolina at
	Chapel Hill
Co-Chair: Li, Xiaoou	Chapel Hill CINVESTAV-IPN
Co-Chair: Li, Xiaoou 15:45-16:05	•
15:45-16:05	CINVESTAV-IPN
15:45-16:05	CINVESTAV-IPN TuCT5.1
15:45-16:05 Capability-Based Frameworks fo	CINVESTAV-IPN TuCT5.1 or Industrial Robot Skills: A Survey
15:45-16:05 Capability-Based Frameworks for Pantano, Matteo	CINVESTAV-IPN TuCT5.1 or Industrial Robot Skills: A Survey Siemens AG
15:45-16:05 Capability-Based Frameworks for Pantano, Matteo Eiband, Thomas	CINVESTAV-IPN TuCT5.1 or Industrial Robot Skills: A Survey Siemens AG German Aerospace Center (DLR) Technische Universität Wien (TU
15:45-16:05 Capability-Based Frameworks for Pantano, Matteo Eiband, Thomas Lee, Dongheui 16:05-16:25	CINVESTAV-IPN TuCT5.1 TruCT5.1 TruCT5.1 TruCT5.1 TruCT5.1 TrucT5.2 TrucT5.2 TrucT5.2 TrucT5.2 TrucT5.2 TrucT5.2
15:45-16:05 Capability-Based Frameworks for Pantano, Matteo Eiband, Thomas Lee, Dongheui 16:05-16:25 A Flexible Collision-Free Trajector	CINVESTAV-IPN TuCT5.1 TruCT5.1 TruCT5.1 TruCT5.1 TruCT5.1 TrucT5.2 TrucT5.2 TrucT5.2 TrucT5.2 TrucT5.2 TrucT5.2

Capability-Based Frameworks	s for Industrial Robot Skills: A Survey
Pantano, Matteo	Siemens AG
Eiband, Thomas	German Aerospace Center (DLR)
Lee, Dongheui	Technische Universität Wien (TL Wien
16:05-16:25	TuCT5.2
A Flexible Collision-Free Traje by Combining Q-Learning and	ectory Planning for Multiple Robot Arms I RRT
Kawabe, Tomoya	Okayama University
Nishi, Tatsushi	Okayama University
16:25-16:45	TuCT5.3
Acoustic Based GMAW Penet Droplet Transfer Monitoring	tration Depth Identification Using
Cullen, Mitchell	University of Technology Sydney
Ji, Jinchen	University of Technology Sydne
Zhao, Sipei	Centre for Audio, Acoustics and Vibration, Faculty of Engineering
16:45-17:05	TuCT5.4
Process Dynamics-Aware Fle.	xible Manufacturing for Industry 4.0
Balszun, Michael	Technial University of Municl
Hobbs, Clara	Department of Computer Science UNC-Chapel Hi
Fraccaroli, Enrico	University of North Carolina a Chapel Hi
Roy, Debayan	Technical University of Municl
Fummi, Franco	University of Verona
Chakraborty, Samarjit	TU Munich, German
17:05-17:25	TuCT5.
Convolutional Autoencoder an Virtual Metrology	nd Transfer Learning for Automatic
Hsieh, Yu-Ming	National Cheng Kung University Institute of Manufacturing Info
Wang, Tan-Ju	National Cheng Kung Universit
Lin, Chin-Yi	National Cheng Kung Universit
Tsai, Yueh-Feng	National Cheng Kung University
Cheng, Fan-Tien	National Cheng Kung Universit
17:25-17:45	TuCT5.
	led Projects (SCFP) with DrOWLings
Ehm, Hans	Infineon Technologies AC

Ramzy, Nour

Leibniz Universität Hannover,

	Infineon Technologies AG	TuCT7	Colonia
Ulrich, Philipp	Infineon	Automation in Life Sciences a	and Human-In-The-Loop (Regular
Durst, Sandra	Infineon	Session)	
Masip, Agnes	Infineon	Chair: Chen, Yue	Georgia Institute of Technology
		Co-Chair: Wang, Jiacun	Monmouth University
TuCT6	Imperio C	15:45-16:05	TuCT7.1
Wearable Robots and Soft Man	, , ,	Automatic Triage and Image Mo	osaicking in the Ophthalmology
Chair: Wen, John	Rensselaer Polytechnic Institute	Specialisation	
Co-Chair: Haghshenas- Jaryani, Mahdi	New Mexico State University	Hu, Roger	University of Auckland
•	TuCT6.1	Chalakkal, Renoh Johnson	Senior Research Engineer
15:45-16:05		Linde, Glenn	ODocs Eye Care
vvearable Sensing and Knee Exo. Assistance	skeleton Control for Awkward Gaits	Dhupia, Jaspreet	The University of Auckland
Zhu, Chunchu	Rutgers University	16:05-16:25	TuCT7.2
Han, Feng	Rutgers University	Automated Sample Pretreatmer	nt and Measurement of ng a Biomek I7 Hybrid Workstation
Yi, Jingang	Rutgers University	and LC-MS/MS	ig a biolilek I/ Hyblid Workstation
16:05-16:25	TuCT6.2	Fleischer, Heidi	University of Rostock
Learning-Based Error-Constraine	d Motion Control for Pneumatic	Bach, Anna	University of Rostock
Artificial Muscle-Actuated Exoske		Anne, Reichelt	University of Rostock
Experiments		Wijayawardena, Bhagya	Beckman Coulter Life Sciences
Yang, Tong	Nankai University	Kheradmand, Miranda	Beckman Coulter Life Sciences
Chen, Yiheng	Nankai University	Thurow, Kerstin	University Rostock
Sun, Ning	Nankai University	16:25-16:45	TuCT7.3
Liu, Lianqing	Shenyang Institute of Automation	-	ntrol of LVAD with Pulsatility Ratio
Qin, Yanding	Nankai University	Modulation	
Fang, Yongchun	Institute of Robotics and Automatic Information System,	Azizkhani, Milad	Georgia Institute of Technology
	College	Chen, Yue	Georgia Institute of Technology
16:25-16:45	TuCT6.3	16:45-17:05	TuCT7.4
Adaptive Quasi-Static Motion Cor	ntrol of a Soft Robotic Exo-Digit in	Identify Bottlenecks of Patient F	low in Emergency Departments
Physical Human-Wearable-Soft-F		Hu, Yuansi	Monmouth University
Haghshenas-Jaryani, Mahdi	New Mexico State University	Wang, Jiacun	Monmouth University
16:45-17:05	TuCT6.4	Liu, Guangjun	Tongji University
Robotic Fabric Fusing Using a No	ovel Electroadhesion Gripper	17:05-17:25	TuCT7.5
He, Honglu	Rensselaer Polytechnic Institute		orate: Understanding Human-Robot
Saunders, Glenn	Rensselaer Polytechnic Institute	Collaboration	
Wen, John	Rensselaer Polytechnic Institute	Villani, Valeria	University of Modena and Reggio Emilia
17:05-17:25	TuCT6.5	Ciaramidaro, Angela	University of Modena and Reggio
Force Sensing Based on Nail Det Fingertip Force in Detailed Work	ormation for Measurement of	Iani, Cristina	Emilia University of Modena and Reggio
Yamazaki, Kimitoshi	Shinshu University		Emilia
Nakagawa, Yuto	Shinshu University	Rubichi, Sandro	University of Modena and Reggio
Ishikawa, Akihisa	Shinshu University	Oakatini Lanana	Emilia
Hirayama, Motoki	JUKI Corporation	Sabattini, Lorenzo	University of Modena and Reggio Emilia

CASE 2022 Author Index

Abbasi-Hashemi, Taha	TuBT1.6	Bao, YuanYi	SuCC2.4
Abbate, Gabriele	SuBM3.2	Barton, Kira	SuBCAP.4
Abdelkawy, Hazem	TuBT3.1		SuAM2.5
Abdolshah, Saeed	TuCT2.2		MoBM5.1
Abdulhafiz, Ibrahim	TuBT1.6	Daniella Livia	TuAT3.5
Adebola, Simeon Oluwafunmilore	SuBCAP.5 TuCT1	Bascetta, Luca	SuBM1.3 TuBT4.6
Adeleye, Akanimoh	TuCT1.4		TuCT2.5
Adnan, Muhammad	SuAM1.4		TuCT2.5
Adrian, Nicholas	TuAT2.5	Basiri, Salar	TuBT5.4
Aeron, Shrey	SuBCAP.5	Bebek, Ozkan	SuBM3
Aertbelien, Érwin	MoAM1.1		SuBM3.5
Aghajanzadeh, Omid	SuBM5.1	Becker, Aaron	TuBT4.1
Ahmad, Shakeeb	TuCT4.1	Becker, Pascal	TuCT1.6
Abor to an array	TuCT4.1	Begovich, Ofelia	MoAM6
Ahn, Jeongsun	MoCC2.5 SaBC2.1		MoAM6.4 TuBT1.3
Ai, Yi Aiyama, Yasumichi	MoBM1.2	Behera, Laxmidhar	MoAw2S.1
Akesson, Knut	SuBM4.4	Behera, Laxmidhar	TuBT4.2
, moodin, rande	MoAM3.5	Behnke, Sven	SuBM2.3
AlBahar, Areej	TuBT7.3	Bekiroglu, Yasemin	MoAM1.2
Alexandri, Ioanna O	MoCC1.2	Bennewitz, Maren	SuAM6.1
Alkomy, Hassan	MoBM4.1	Bergeles, Christos	MoBM1.5
Alqatamin, Moath	MoAM1.3	Bertilsson, Filip	SuBM4.4
Alramadeen, Wesam	MoBM6.6	Bezerra, Ranulfo	SuAM5.3
Altamirano Cabrera, Miguel	SuBM3	Bhamgara, Hanoz	SuBCAP.6
	SuBM3.3 SuBM3.4	Bhati, Hardik Bhatiani, Sahil	TuBT4.4 SuAM2.1
Amirat, Yacine	TuBT3.1	Bhatt, Neel P.	MoAM4.1
Amirshirzad, Negin	SuBM3.5	Bhatta, Kshitij	TuBT7.2
An, Yu	MoAw1H.1	Bhattacharya, Samar	MoBM4.5
Anand, Kritika	MoBM3.4	Bhowmick, Brojeshwar	MoAM3.2
Angarano, Simone	SuAM6.2	•	MoBM3.4
Angleraud, Alexandre	SuAM4.2	Bi, Jing	MoAM2.3
Anne, Reichelt	TuCT7.2	Bi, Mingjie	SuBCAP.4
Aragan Camarana Cararda	TuCT7.2	Bian, Linkan	SuAM1.1
Aragon-Camarasa, Gerardo	SuBM2 SuBM2.4	Bidmead, Jonathan Biediger, Daniel	SuAM2.1 TuBT4.1
Aranda, Miguel	MoBM6.2	Bierbuesse, Jan	TuAT5.1
Arata, Koji	TuBT6.4	Bimrose, Miles	TuAT3.4
Arbanas Ferreira, Barbara	MoAM6.3	Bin Othman, Muhammad Shalihan	MoAM4.2
Arinez, Jorge	TuBT7.1		MoBM3.1
Aryadi, Hanif	SuAM5.3	Birch, Jeremy	MoBM1.5
Askari, Bahman	MoAM1.5	Bogdan, Stjepan	MoAM6.3
Atasoy, Bilge	SuCC3.1	Bonne, Sophea Boonto, Sudchai	MoBM1.6
Athukorala, Achala Ausonio, Elena	MoAM4.2 SuAM6.6	Bozma, H. Isil	TuBT1.5 MoAM5.4
Aviles Mejia, Jorge Eduardo	SuBM1.6	Bozza, Augusto	MoAM1.5
Avizzano, Carlo Alberto	MoBM7.3	Bragin, Mikhail	MoAM5.3
Azizkhani, Milad	TuCT7.3	Briz, José Luis	TuBT5.1
	TuCT7.3	Brown, Daniel	MoAM3.6
Bach, Anna	TuCT7.2	Brown, W. Eric	MoAM3.1
	TuCT7.2	Buch, Anders Glent	SuAM4.4
Bagavathiannan, Muthukumar	SuAM5.6	Bucknall, Richard	SuBM4.3
Bagnerini, Patrizia	SuAM6.6	Burnstein, Jeff	MoIP22
Bai, Liping Bakali El Kassimi, Ahmed	TuAT5.6 SuBM7.3	Buzzatto, Joao	MoIP22.1 SaWAM4.1
Balakirsky, Stephen	TuBT5.6	C, C	SaBC3.4
Balakrishna, Ashwin	MoAM3.6	Caesar, Birte	TuAT3.5
Balamurali, Mehala	SuAM5.4	Cai, Lei	SaAC3.2
Baldoni, Philip	SuBM4.1	Caliskan, Umut	MoAM1.1
Balszun, Michael	TuCT5.4	Camacho Gonzalez, Gerardo Jesus	MoBM7.3
D. 11	TuCT5.4	Campbell, Mark	SuBM1.2
Balta, Efe	MoBM5.1	Campbell, Merrick	MoAM6.5
Banerjee, Imon	MoAw1H.3	Cao, Lingling	MoAw2S.3
Banerjee, Snehasis	MoAM3.2 MoBM3.4	Cao, Lingling Cao, Minhao	MoAM2.6 MoDC1.5
Bao, Jinsong	SaAC2.2	Cao, Tirui	SaAC2.5
233, 011100119	SaAC3.4	Cao, Xiaoyu	MoDC2.3
Bao, Jinsong	SaBC1	Cao, Yunkang	SuCC2.2
-		-	

Cao, Zhengcai	TuAT1.3		MoAM7.5
Cardenas, Pedro	MoAM3.4		TuBT7.6
Cariou, Christophe	SuBM5.1		TuCT5.5
•			
Carli, Raffaele	MoAM1.5		TuCT5.5
	MoAM5.6	Cheng, Mingyang	SaAC1.6
	TuBT4.5	Cheng, Qiangqiang	TuAT2.3
Carlos A Leca Perez, Carlos Leca	TuCT3.3	Cheng, Ying	TuAT6.5
	TuCT3.3	Chetan, Gupta	MoBM3.3
Carpin, Stefano	MoAM5	Chew, Ting Gang	SuCC1.2
Oaipin, Otelano		Chickers Mercelle	
	MoAM5.2	Chiaberge, Marcello	SuAM6.2
Cassandras, Christos G.	SuAM6.3	Chibani, Abdelghani	TuBT3.1
Castro, Spartacus	SuBM4.2	Chihara, Nobuhiro	SuBM2.5
Cavone, Graziana	MoAM1.5	Childers, Marshal	SuAM7.5
- , -	TuBT4.5	Choi, Jeongsub	MoBM6.3
Cerrato, Simone	SuAM6.2	onoi, coongous	TuAT6
Cersullo, Mattia	MoAM1.6		TuBT7
Chaikovskaia, Mari	TuCT2.3	Chong, Nak Young	SuAM3.3
Chairez, Isaac	SuAM7.4	Chou, Chun-An	SuBM7
Chakraborty, Samarjit	TuCT5.4		SuBM7.5
	TuCT5.4	Chour, Kenny	SuAM7.5
Chalakkal, Renoh Johnson	TuCT7.1	Christensen, Henrik	SuBM2.6
Chalakkai, Kehon Johnson		Christensen, Herrik	
	TuCT7.1		TuCT1.4
Chan, Shao-Hung	TuBT5.5	Christensen, Henrik Iskov	SuBM1.1
Chang, Fangshou	SuAM4.3		TuAT7.1
Chang, Peng	TuAT7.3	Ciaramidaro, Angela	TuCT7.5
Chang, Qing	MoAM2	- ····, · ··· -	TuCT7.5
Orlang, wing		Cialmials Craagara	
	MoAM2.5	Cielniak, Grzegorz	MoAM6.1
	TuAT5.5	Clemon, Lee	SuAM1.3
	TuBT7.1	Cocho, Mathieu	SuBCAP.1
	TuBT7.2	Colgate, Edward	SuBM5.4
Chang, Yongsheng	SaAC2.6	Cong, Rui	SuCC3.6
Chang, Yuanlin	MoDC2.3	Contreras, Cuauhtemoc	MoAM6.4
Chatzilygeroudis, Konstantinos	MoBM5.4	Contreras-Toledo, Luis Angel	SuBM2.2
Chau, Zhong Hoo	SuCC1.2	Corrales Ramon, Juan Antonio	SuBM5.1
Che, Haichuan	SuCC3.2		MoBM6.2
Chen, Changchuan	SuCC1.4	Costa, Carlos	MoBM6.6
Chen, Chao-Chun	SuAM2.4	Coutinho, Fernando	SuAM1.6
Chen, Chong	SaAC1.4	Cowan, Cregg	MoBM1.6
Officit, Officing	SuCC1.3	Cronrath, Constantin	TuCT2.6
		Cronrain, Constantin	
	TuAT4		TuCT2.6
Chen, Feng	SaBC1.5	Cruz-Ortiz, David	SuAM7.4
Chen, Gang	SuBM6	Cubro, Edin	SuBM7.1
•	SuBM6.5	Cui, Jia	SuBCAP.3
Chen, Gang	MoCC1.1	Cui, Peng-Hao	MoAM2.5
Chen, Gongyu	SuBCAP.4	Cullen, Mitchell	TuCT5.3
		Cullen, Millonell	
Chen, Haonan	TuAT3.2		TuCT5.3
Chen, Haoyao	SaAC1.3	D'Avella, Salvatore	MoBM1
Chen, Lawrence Yunliang	MoAw2S.5		MoBM1.3
Chen, Linhui	TuAT1.5		MoBM7.3
Chen, Nan	MoDC1	Da Cruz, Lyndon	MoBM1.5
Chen, Qijun	SuCC2.3	Dahmouche, Redwan	SuAM5.1
		Dai, Jiabin	
Chen, Shanen	MoAw1H.1		SaAC1.5
Chen, Shyh-Leh	TuBT1.5	Dai, Shihao	MoAM2.2
Chen, Suhao	MoAw1H.2	Dall'Alba, Diego	TuBT6.2
Chen, Tan	TuAT3.6	Danielczuk, Michael	MoAw2S.5
Chen, Weihua	SaBC2.2	Darbha, Swaroop	SuAM7.5
Chen. Weiwei	TuBT2	Das, Sumit Kumar	MoAM1.3
Chen, Xinyun	MoCC3.2	Dastider, Apan	MoBM3.2
Chen, Yi	TuBT3.2	Davoodi, Mohammadreza	SuBM5.3
Chen, Yiheng	TuCT6.2	de Silva, Rajitha	MoAM6.1
	TuCT6.2	Dean, Emmanuel	MoAM3.5
Chen, Yong	MoCC1.6	Decré, Wilm	MoAM1.1
Chen, Yue	TuCT7	Degeler, Viktoriya	MoAM7.4
	TuCT7	Deisenroth, Marc Peter	MoAM1.2
	TuCT7.3	del Cacho Estil-les, María Asuncion	TuAT1.2
	TuCT7.3	Della Rossa, Fabio	SuBM1.3
Chen, Yufeng	MoCC2.1	Deng, Yu-Wen	TuAT6.1
Chen, Yuhao	SuBCAP.2	Dercole, Fabio	SuBM1.3
Chen, Zheng	TuCT4.4	Detzner, Peter	SuAM2.2
- ··, —·····	TuCT4.4	Devine, Declan	MoAM3.3
Chang Dangfang			
Cheng, Dongfang	TuAT2.3	Dharmala, Amarthya Sasi Kiran	MoAM3.2
Cheng, Fan-Tien	SuAM1.4		MoBM3.4
	SuAM2.4	Dharmarajan, Karthik	MoBM1.6
	SuAM2.4 SuAM2.6	Dharmarajan, Karthik Dhupia, Jaspreet	MoBM1.6 TuCT7.1

	T 0T= 4	5 011	0.004.0
Disa Alexandra Osales	TuCT7.1	Feng, Siqi	SaBC1.3
Diaz Alvarenga, Carlos	MoBM4.6	Feng, Yunjian	TuAT1.1
Diego, Peredo	TuBT2.5	Feng Gao, Feng	MoDC2.3
Dietmayer, Klaus	TuCT3.1 TuCT3.1	Fenghua, Zhu Fer, Danyal	MoCC3.3 MoBM1.6
Dillmann, Rüdiger	TuCT1.2	Ferdousi, Rahatara	TuAT2.2
Dillinarii, Rudiger	TuCT1.6	Fernandez-Anaya, Guillermo	TuCT3.5
Ding, Chen	SaBC1.4	Tomandoz Anaya, Gamerino	TuCT3.5
Ding, Han	SuCC3.5	Ferrarini, Luca	MoAM7
Ding, Jingjing	SuCC1.2		MoAM7.3
Ding, Yu	MoAM3	Ferreira, Placid	TuAT3
o .	MoAM3.1		TuAT3.1
Do, Thanh-Toan	MoAw2S.3	Ferreira, Placid	TuBT5.4
Do, Van-Thach	TuAT2	Fiorini, Paolo	TuBT6.2
	TuAT2.5	Fitch, Robert	SuAM1.3
Dogan, Ayse	SuBM7.4	Fleischer, Heidi	TuCT7.2
Dollar, Aaron	MoAM4.3	FI 0 1	TuCT7.2
Domae, Yukiyasu	SuBM3.6	Flores, Gerardo	MoAM1.4
Dong, Heng	MoDC2.6	Fontana, Marco	MoBM1.3
Dong, Yue	SuBM7.1	Forstenhäusler, Marc	TuCT3.1 TuCT3.1
Dong, Yun Dotoli, Mariagrazia	SaBC2.2 MoAw2S	Fortino, Giancarlo	SuBM1.4
Dotoli, Managrazia	MoAW23 MoAM1	Fraccaroli, Enrico	TuCT5
	MoAM1.5	Traccaron, Enrico	TuCT5
	MoAM5.6		TuCT5.4
	TuBT4.5		TuCT5.4
Dotterweich, James	SuAM7.5	Fransen, Karlijn	MoAM5.1
Driggs-Campbell, Katherine	TuAT3.6	Franzè, Giuseppe	SuBM1.4
Driggs-Campbell, Katie	TuAT3	• • • • • • • • • • • • • • • • • • • •	MoAM1.6
	TuAT3.2	Frigerio, Nicla	MoAM7.6
Du, Linghao	SuCC1.6	From, Pål Johan	SuAM6.4
Du, Shoukang	SuCC1.2	Fu, Xuke	SaAC2.4
Duan, Li	SuBM2.4	Fujikura, Daiki	SuBM2.1
Duan, XuHai	MoCC1.6	Fummi, Franco	TuCT5.4
Duarte Méndez, Vicente Adnan	TuBT3.5		TuCT5.4
Durst, Sandra	TuCT5.6	Gaebert, Carl	SuBM4.6
Dutto Avan	TuCT5.6 TuBT4	Gaggero, Mauro Gajic, Ognjen	SuAM6.6 SuBM7.1
Dutta, Ayan	TuBT4.3	Gambardella, Luca	SuBM3.2
Ebner, Andreas	SuAM2.2	Gans, Nicholas (Nick)	SuBM5
Ehm, Hans	TuCT5.6	Caris, Microlas (Mick)	SuBM5.3
Limi, Flanc	TuCT5.6	Gao, Feng	MoAM2.2
Eiband, Thomas	TuCT5.1		MoCC1.5
,	TuCT5.1	Gao, Haiming	TuCT4.2
Eichmann, Christian	TuCT1.2		TuCT4.2
Eker, Ahmet Harun	MoAM5.4	Gao, Junfeng	MoAM6.1
El Saddik, Abdulmotaleb	TuAT2.2	Gao, Liang	SuCC2.1
El Shar, Ibrahim	MoBM3.3		SuCC2.2
Elara, Mohan Rajesh	TuCT3.6		MoCC3.4
EI	TuCT3.6	Gao, Siyang	TuBT2
Elgeneidy, Khaled	SuAM6.4	Cas Viv	TuBT2.1
Elibol, Armagan	SuAM3.3	Gao, Xu	MoAM4.5
Ernst, Kilian Escareno, Juan-Antonio	SuAM3.2 MoBM4.3	Gao, Yiping Gao, Ziyan	MoCC3.4 SuAM3.3
Fajardo, Jose Manuel	MoAM3.4	Garg, Armaan	TuBT6.6
Fan, Xiaoyu	MoDC1.3	Garrido, Rubén	SuBM5.2
Fang, Cheng	SuAM3.1	Gauthier, Michael	SuAM5.1
Fang, Qihang	MoCC3.3	Gayon, Jean-Philippe	TuCT2.3
Fang, Yongchun	TuAT1.6	Gebiola, Marco	MoAM6.5
3, 3	TuCT4.2	Geng, Junyi	TuAT3.6
	TuCT4.2	Geng, Ruijie	SuAM2.5
	TuCT6.2	George, Nijil	TuAT7.2
	TuCT6.2	Ghorbanpour, Sahand	SuBCAP.1
Fanti, Maria Pia	SaWAM1.1	Ghosh, Anirban	TuBT4.3
	TuAT1	Giannini, Francesco	SuBM1.4
	TuAT1	Gil Bayardo, Raul	TuBT1.1
Cov. Alexander	TuAT1.2	Gilles, Maximilian	SuBCAP.2
Fay, Alexander	TuAT3.5 SuBM3.3	Giusti, Alessandro	SuBM3.2 TuCT3.1
Fedoseev, Aleksey Fei, Hongying	MoDC1	Glasenapp, Carsten	TuCT3.1
Felix, Braulio	TuCT3.6	Goldberg, Ken	SuBCAP.5
i Siix, Diddiio	TuCT3.6	Colubbing, Itoli	MoAw2S.5
Feng, Lei	SuAM3.4		MoAM3.6
0 ,	SuAM5.5		MoBM1.6
			-

Gómez Peña, Guillermo	TuCT2.2		TuCT6.4
Gong, Xu	MoDC2.3	He, Qiqi	MoCC3.5
Gonzalez, Felipe	MoAM3.4	He, Wenhao	MoAM4.6
Gordon, Martin	SuBM4.4	He, Yizhen	SaBC1.5
Gu, Zhenwei	MoAM2.4	Helus, Victoria	TuBT3.3
Guan, Liuen	SaBC1.4	Hendrik, Nessau	TuCT1.2
Guan, Xiaohong	SaAC3.6	Heredia, Juan	SuBM3.4
Guari, Augustoria	SuP2L.1	Hernández, Juan David	SuBM4.5
	MoAM2.1	richiandez, dan bavid	MoAM3.4
		Harnandaz Martinaz Eduarda Camalial	
Over Ween	MoAM2.2	Hernandez-Martinez, Eduardo Gamaliel	TuCT3.5
Guan, Yuan	SuBM5.6		TuCT3.5
Guan, Yuling	SuAM7.1	Hicks, Yulia	TuAT4.2
Gui, Zhongcheng	TuAT1.4	Higa, Ryota	MoBM3
Gumma, Kevin	MoBM5.2		MoBM3.5
Gundecha, Vineet	SuBCAP.1	Hill, Andrew John	SuAM5.4
Gunji, Kenta	SuAM5.3	Hirayama, Motoki	TuCT6.5
Guo, Dejun	TuBT5.6		TuCT6.5
Guo, Fengzhi	SuAM3.1	Ho, Chieh-Ying	TuAT6.1
Guo, Shenghan	SuAM1.1	Hobbs, Clara	TuCT5.4
Guo, Weihong	SuAM1.1	,	TuCT5.4
- , 3	SuBM4	Hoj, Henning Si	SuBM1.1
	SuBM4.3	Hong, Guiyu	MoCC3.2
Guo, Weisi	MoBM7.1	Hoque, Ryan	MoAM3.6
	SuCC3.1	Hosseini Jafari, Bashir	SuBM5.3
Guo, Wenjing			Subivio.3 SuCC3.6
Cup Vin	TuAT1	Hou, Chen	
Guo, Xin	TuAT4	Hsiao, Hung-Chang	SuAM2.4
Guo, Xiwang	SaWAM3.1	Hsieh, Chiao	TuCT3.2
Guo, Yue	MoAM4.6		TuCT3.2
Guo, Yuebin	SuAM1.1	Hsieh, Yu-Ming	SuAM2.4
Guohua, Liu	SaAC3.3		SuAM2.6
Gupta, Anish	TuCT4.6		MoAM7.5
	TuCT4.6		TuBT7.6
Gupta, Gunjan	MoBM2.2		TuCT5.5
Guzzi, Jerome	SuBM3.2		TuCT5.5
Haas, Stephan	SuAM7.1	Hsu, Chia-Yu	TuAT6
Haben, Fabian	TuCT1.3	, -	TuAT6.2
Haddadin, Sami	TuCT2.2	Hsu, Chih-Hua	TuBT7.4
Hagelskjær, Frederik	SuAM4.1	Hu, Bo	SuCC1.3
Hager, Gregory	MoAM4.3	Hu, Chengsong	SuAM5.6
riager, Gregory	MoBM7.4	Hu, Jiaming	TuAT7.1
Haghshenas-Jaryani, Mahdi	TuCT6	riu, Jiailiilig	TuCT1.4
nagrisherias-Jaryani, Manui		III. Barahan	
	TuCT6	Hu, Jianchen	SaAC2.4
	TuCT6.3	Hu, Jiawei	TuAT7.5
	TuCT6.3	Hu, Jinhua	SaBC3.5
Hagihara, Daisuke	SuBM2.5	Hu, Qinglong	MoAM2.3
Haibin, Zhu	SuWCC3.1	Hu, Roger	TuCT7.1
Hajieghrary, Hadi	MoAM1		TuCT7.1
	MoAM1.2	Hu, Tianxiang	TuAT3.4
Hamad, Mazin	TuCT2.2	Hu, Yang	SuBCAP.3
Han, Feng	SuAM6	Hu, Yuansi	TuCT7.4
-	MoAM6.6		TuCT7.4
	TuCT4.5	Hu, Zhaolin	MoDC1.4
	TuCT4.5	Hu, Zhigiang	TuBT6.4
	TuCT6.1	Huang, Baoying	TuAT5.6
	TuCT6.1	Huang, Hao	MoAM2.4
Han, Tiaojuan	TuAT6.6	Huang, Hsien-Cheng	SuAM2.4
Han, Xinming	MoDC1.1	Huang, Huang	MoAw2S.5
Han, Xinyong	SuCC1.1	Huang, Tidang Huang, Jianchuan	TuAT4.1
Han, Yi	TuCT4.5		TuBT7.2
пап, ті		Huang, Jing	
Hankaida Mana	TuCT4.5	Huang, Qiang	SaWBM2.1
Hanheide, Marc	SuAM6.5		SuAM1
Hani Daniel Zakaria, Mélodie	MoBM6.2		SuAM1.2
Hansen, Søren	SuBM1.1	Huang, Rui	TuAT1.4
Hansson, Johan	SuBM4.4	Huang, Xinyan	TuCT4.5
Hao, Tieng	SuAM2.4		TuCT4.5
Hardin IV, Robert G.	SuAM5.6	Huang, Yu-Li	SuBM7.2
Hare, Ryan	MoBM7.6	Huang, Yuanmeng	TuAT2.6
Hashemi, Ehsan	MoAM4	Huang, Zhe	TuAT3.6
	MoAM4.1	Huang, Zhiheng	SuCC3.3
Hashizume, Jiro	SuBCAP.6	Huck, Tom Philip	TuCT2.6
Haugaard, Rasmus Laurvig	SuAM4.4	, F	TuCT2.6
Hayat, Abdullah Aamir	TuCT3.6	Huiying, Xu	MoDC2.3
	TuCT3.6	Hujo, Dominik	TuBT6.3
He, Honglu	TuCT6.4	,0, 50	TuCT1.1
, 11011914	. 40 . 6		

Humann, James	SuAM7.5		TuAT5.4
Humbert, James Sean	TuCT4.1	Julius, Agung	SuAM5
	TuCT4.1		SuAM5.2
Hung, Min-Hsiung	SuAM2.4	Jung, Hong-ryul	TuCT1.5
Hung, Yu-Hsin	TuAT6.1	Kala, Rahul	TuBT4.4
Hvarfner, Carl	MoBM5.4	Kalinov, Ivan	SuAM3.5
Iani, Cristina	TuCT7.5	Kallmann, Marcelo	MoBM4.6
Ibarra Zannatha, Juan Manuel	TuCT7.5 MoBM1.4	Kanarachos, Stratis	SuAM6.4
Ichnowski, Jeffrey	MoAw2S.5	Kapadia, Mustafa	TuBT5.4 MoAM3.3
iciliowski, Jelliey	MoBM1.6	Kapukotuwa, Jayasekara Karayiannidis, Yiannis	MoAM3.5
Imbusch, Benedikt T.	SuBM2.3	Karl, Matthias	TuCT3.1
Incremona, Gian Paolo	SuBM1	ran, watinas	TuCT3.1
moromona, Glari i dolo	SuBM1.3	Karl Kempf, Karl Kempf	TuCT3.3
Ing, Ching Kang	TuBT7.6	ran rompi, ran rompi	TuCT3.3
Iquebal, Ashif	MoAw1H.3	Karpyshev, Pavel	SuAM3.5
Ishikawa, Akihisa	TuCT6.5	Karydis, Konstantinos	MoAM6
,	TuCT6.5	,	MoAM6.5
Islam, Upala	MoAw1H.3		TuBT1.2
Ismail, Khairuldanial	MoAM4.2	Katija, Kakani	SuBM4.2
Ito, Kiyoto	SuBCAP.6	Kato, Fumihiro	SuAM4.3
•	SuBM2.5	Kaur, Upinder	TuAT2.6
	MoBM2.6	Kawabe, Tomoya	TuCT5.2
Iversen, Thorbjørn Mosekjær	SuAM4.4	•	TuCT5.2
Iwata, Hiroyasu	SuAM4.3	Kendall, Peter	MoBM5.2
Jalali, Amir	TuBT1.6	Kerner, Sören	SuAM2.2
Jami, Milad	MoAM4.4	Kerr, Justin	MoBM1.6
Janabi-Sharifi, Farrokh	TuBT1.6	Kershaw, Joseph	SuAM4.6
Jang, Young Jae	SuBM6.3	Khadraoui, Sofiane	MoAM1.4
	SuBM6.4	Kharyal, Chaitanya	MoBM3.4
	MoBM5.3	Khatkar, Jayant	SuAM1.3
Javed, Zaynah	MoAM3.6	Khazaei Pool, Maryam	MoBM4.6
Jeong, Myong K.	MoBM6.3	Kheddar, Abderrahmane	MoBM1.4
Jha, Shashi Shekhar	TuBT6.6	Kheradmand, Miranda	TuCT7.2
Ji, Fan	SuAM2.3	Kina Dunaan	TuCT7.2
Ji, Jinchen	TuCT5.3 TuCT5.3	Kim, Duyeon Kim, Hyun-Jung	MoCC2.6 SuBM6
Ji, Qinglei	SuAM3.4	Killi, Hyuli-bung	SuBM6.1
Ji, Ying	MoDC1		MoCC2
Ji, Ze	SuBM4.3		MoCC2.5
01, 20	MoAM3.4		MoCC2.6
Ji, Zhenrui	SaBC1.2		TuAT4
-,	SaBC1.3		TuAT4.6
Ji, Zuzhen	MoCC1.6	Kim, Inyoung	TuBT7.3
Jia, Qing-Shan	SaWAM1.1	Kim, Yitaek	TuBT6.5
•	SaAC1.1	Kimura, Nobutaka	SuBM2.5
	SaAC3.6		MoBM2.6
Jia, Yunyi	TuBT3	Kincade, Jerri-Lynn	MoBM1.6
	TuBT3	King, William	TuAT3.4
	TuBT3.2	Kingery, Aaron	SuBM1.5
Jia, Zhenzhong	SuCC3.2	Kittaka, Tatsuya	TuAT7.4
	MoCC3.1	Knoth, Bruce	MoBM1.6
Jia, Zhiyang	MoDC2	Kobilarov, Marin	MoBM7.4
Barra Davidana	TuAT5	Koenig, Sven	SuAM7.1
Jiang, Baoxiang	SuCC2.4	IZ-le Modelin	TuBT5.5
Jiang, Guangxin	TuBT2.4	Koh, Yubin	TuCT3.2
Jiang, Jiaqi	MoAw2S.3	Kalimaa Chatana	TuCT3.2
Jiang, Jinyang	MoCC1.3	Kojima, Shotaro	SuAM5.3
Jiang, Peng Jiang, Sheng-long	SuAM4.5 MoAM2.6	Kolomeytsev, Anton	SuAM3.5 MoDC1.6
Jiang, Shixing	SuCC3.2	Kong, Yiying Konyo, Masashi	SuAM5.3
Jiang, Zhaoyu	SaAC3.6	Kornmaneesang, Woraphrut	TuBT1.5
Jin, Xiao	TuBT2	Kovalenko, Ilya	SuAM2
0111, 711a0	TuBT2 TuBT2.2	Novaloniko, nya	SuAM2.5
Jin, Xiaoning	MoAw2S.2		MoBM5
Jin, Zongxiang	TuBT1.4		MoBM5.1
Jiqi, Li	SaAC3.3	Kraft, Dirk	SuAM4.1
Johansson, Rolf	TuCT2.4	Kramberger, Aljaz	TuBT6.5
	TuCT2.4	Krarup, Benjamin	SuBM3.1
Johnson, Dazzle	SuBM6.5	Kraus, Werner	SuAM3.2
Ju, Feng	SuAM2	Krishna, Madhava	MoAM3.2
. •	MoDC2	•	MoBM2.2
	TuAT5		MoBM3.4
	TuAT5		TuCT4.6

Krivice, Semble SuBM3.1		TuCT4.6		TuAT3.3
TuCT2.6	Krivic, Senka		Li, Houjian	
Kruger, Volker (Krüger, Marius TUCT1-1	· · · · · · · · · · · · · · · · · · ·	TuCT2.6		TuBT5.5
Krüge, Marius		TuCT2.6	Li, Jiayi	TuBT1.4
TuCT1.3	Krueger, Volker	MoBM5.4	Li, Jie	SaAC2.2
Kruzhkov, Evgeny SuAM3.5 MoNAVIH	Krüger, Marius	TuCT1.1	Li, Jingshan	SaBC2.5
Kuang, Yuan	-	TuCT1.3	•	SuP3L
Kuang, Zhian SuBMS-5 Li, Jun TuAT1-1 Kumar, Guishan MoRM3-4 Li, Junda MoCC1-5 Kumar, T.K. Satish MoRM3-4 Li, Junda MoCC1-5 Kumar, T.K. Satish MoRM3-4 Li, Junda MoCC1-5 Kumar, T.K. Satish SuAM7-1 Li, Kang SuCC3-3 Kumara, Soundar SuAM7-1 Li, Kun SuCC3-6 Kumar, T.K. Satish SuAM7-1 Li, Kun SuCC3-6 Kumar, T.K. Satish SuAM3-5 Li, Kun SuCC3-6 Kumar, T.K. Satish SuAM3-5 Li, Kun SuCC3-6 Kusun, Tushar MoRM4-4 Li, Mengxuan TuAT3-6 Laamarti, Fedwa TuAT2-2 Li, Mengxuan TuAT3-6 Labban-ligbida, Ouidad SuBM1-1 Li, Shuajeng MoCC2-3 SuBM7-1 Li, Menfeng SuAM3-5 Li, Siyu SuAM7-1 Lid, Menfeng SuAM3-2 Li, Siyu SuAM7-1 Lid, Menfeng SuAM3-2 Li, Kisan-Cobe SuBM7-1 Li, Wenfeng SuAC3-2 Li, Kisang TuAT3-6 Lang, SuBM7-1 Li, Wenfeng SuAC3-2 Li, Kisang TuAT3-6 Langas, Jeppe MoRM3-6 Li, Kisang TuAT3-6 SuAM3-2 Li, Kisang TuAT3-6 Langas, Jeppe MoRM3-6 Li, Kisang TuAT3-6 SuCC3-6 Langas, Jeppe MoRM3-6 Li, Kisang TuAT3-6 Langas, Jeppe MoRM3-6 Li, Kisang TuAT3-6 Langas, Jeppe MoRM3-6 Li, Kisang TuAT3-6 Langas, Jeppe SuCC3-6 Langas, Jeppe Li, Kisang L	Kruzhkov, Evgeny	SuAM3.5		MoAw1H
Kumar, Ashish		TuBT3.4		MoDC1.6
Kumar, T. K. Saitsh McBM3.4 Li, Junda McCC1.5 Kumar, T. K. Saitsh SuM7.1 Li, Kang SuCC3.6 Kumar, T. K. Saitsh SuM7.1 Li, Kun SuCC3.6 Kumar, T. K. Saitsh TuT7.2 Li, Kun SuCC3.6 Kurdas, Alexander Andreas TuT7.2 Li, Kun SuCC3.6 Kurdas, Alexander Andreas TuT7.2 Li, Kun SuCC3.6 Kurdas, Massander Andreas TuT7.2 Li, Kun SuCC3.6 Kurdas, Massander Andreas SuM8.3 Li, Li TuT7.2 Li, Kunnur, Tushar McBM3.4 Li, Li TuT7.2 Li, Kunnur, Tushar McBM3.4 Li, Li TuT7.1 Li, Li TuT7.1 Li, Li TuT7.1 Li, Li, Manguan TuT7.1 Li, Shuajpeng McC2.3 Li, Li Manguan TuT7.1 Li, Shuajpeng McC2.3 Li, Li Wang McC2.3 Li, Li Wang McC2.1 Li, Almos SuBM7.1 Li, Wenfeng TuT7.1 Li, Wenfeng TuT7.1 Li, Wenfeng TuT7.1 Li, Wang McC2.1 Landgraf, Christian SuAM2.2 Li, Xiang TuT7.1 Landgraf, Christian SuAM3.2 Li, Xiang TuT7.1 Landgraf, Christian SuAM3.2 Li, Xiang TuT7.1 Landgraf, Christian SuAM3.2 Li, Xiang TuT7.1 Landgraf, Christian TuT7.1 Li, Wenfeng TuT7.1 Landgraf, Christian SuAM3.2 Li, Xiang TuT7.1 Landgraf, Christian SuAM3.2 Li, Xiang SuCC3.5 Lee, Brian McAM3.3 Li, Xiangun SuCC3.4 Lee, Brian McAM3.3 Li, Xiangun SuCC3.4 Lee, Brian McAM3.3 Li, Xiangun SuCC3.4 Lee, Chia-Yen SuBM6.2 Li, Xiangun SuCC3.4 Lee, Dong Jae TuT7.1 Li, Xinyu SaBC1.2 Lee, Dong Jae TuT7.1 Li, Xinyu SaBC1.2 Lee, Dong Jae TuT7.1 Li, Xinyu SaBC1.2 Lee, Jaenh Li, Xinyu SaBC3.5 Lee, Lee, Tae-E				
Kumar, S. Loundar			· ·	
Kumara, Soundar Kurdas, Alexander Andreas TuCT2.2 Li, Kuo SaAC1.1 Kurdas, Alexander Andreas TuCT2.2 Li, Kuo SaAC1.1 SuCC3.4 Kurankov, Mikhail SuAM3.5 Li, Lefel SuCC3.4 Kurankara, Misaso SuAM5.3 Li, Li TuTA1 TuTA1 Krokek, hin Chi SuBC1.1 TuTA1 TuTA1			·	
Kurdas, Alexander Andreas TuCT2.2 Li, Kuo SaAC1.1				
Kurenkoy, Mikhail SuC3 SuC3 SuC3 Kusunur, Tushar MoBMA4 SuC3 Kusunur, Tushar Tushar				
Kusun, Tushar MoBM4 4 SuCC3.4 Kuwahara, Masao SuAMS.3 Li, Li TuAT4.1 Kwok, Hin Chi SaBC1.1 TuAT4.2 Li, Mengxuan TuAT3.2 Labbani-Igbida, Ouiddad SuBM1.6 Li, Shuajpeng MoDC2.3 Lal, Kuan-Chou SuAM2.4 Li, Wang MoDC2.3 Lal, Amos SuBM7.1 Li, Wenfeng SuAM2.2 Land, Kathrin Sophie TuCT1.1 Li, Wenfeng TuAT1.4 Landgraf, Christian SuAM3.2 Li, Xiang TuAT3.8 Langgraf, Christian SuAM3.2 Li, Xiangfer SuCC3.2 Lanzarone, Eltore MoAM3.6 Li, Xiangfer SuCC3.2 Labbani, Service TuCT3.3 Li, Xiangyun SuCC3.3 Labbani, Service TuCT5.6 Li, Xiangyun SuCC3.3 Labbani, Service TuCT5.6 Li, Xiangyun SuCC3.3 Labbani, Service TuCT5.6 Li, Ximyun SuCC3.3 Lee, Brian MoAM3.3 Li, Ximyu SuCC2.2 Lee, Brian MoAM3.5 Li, Ximyu				
Kuwahran, Masao Kwok, Hin Chi SaBC1.1 TuAT4 Laamarti, Fedwa TuAT2.2 Li, Mengxuan TuAT3.2 Li, Mengxuan TuAT3.2 Li, Shuaipeng MoDC2.3			Li, Lefei	
Kwok, Hin Chi SaBC1.1 TuAT1.2 Li, Mengsuan TuAT3.1 Laamarti, Fedwa TuAT2.2 Li, Shualpeng MoDC2.3 Lai, Kuan-Chou SuBM.6 Li, Shualpeng MoDC2.3 Lai, Kuan-Chou SuAM.2 Li, Wang MoDC2.1 Lai, Armos SuBMT.1 Li, Wenfeng TuAT1 Landgraf, Christian SuAM3.2 Li, Xiang TuAT1 Landgraf, Christian SuAM3.2 Li, Xiangfer SuCC3.3 Lanzarone, Ettore MoAM7.8 SuCC3.3 SuCC3.3 Lau, Billy Pik Lik MoAM7.8 Li, Xiangyun SuCC3.5 Lau, Billy Pik Lik MoAM3.3 Li, Xiangyun SuCC3.3 Leebity, Kewin TuCT2.6 Li, Xiangyun SuCC3.3 Lee, Brian MoAM3.3 Li, Xiangyun SuCC3.3 Lee, Brian MoAM3.3 Li, Xiangyun SuCC3.5 Lee, Brian MoAM3.3 Li, Xiangyun SuCC3.2 Lee, Brian MoAM3.3 Li, Xiangyun SuAM7.2 Lee, Brian MoAM3.3				
Laamart, Fedwa			Li, Li	
Labbani-Igbida, Ouiddad SuBM1.6 Li, Shuaipeng MoDC2.3 Lai, Kuan-Chou SuAM2.4 Li, Wang MoDC2.1 Lai, Amos SuBM7.1 Li, Wenfeng SaAC3.2 Land, Kathrin Sophie TUCT1.1 Li, Wenfeng TUAT1 Landgraf, Christian SuBM3.6 Li, Xiang TUAT3.6 Landgraf, Christian SuAM3.2 Li, Xiang TUAT3.6 Landgraf, Christian SuC3.3 Lanzarone, Eltore MoBM3.6 Li, Xiangfei SuC3.5 Lau, Billy Pik Lik MoAM4.2 Li, Xiangun SuC3.3 Leahy, Kevin TuBT3.3 Li, Xiangun SuC3.3 Leahy, Kevin TuCT2.6 TUCT2.6 TUCT2.6 TUCT3.6 TUCT5.1 TUCT5 TUAT6 Li, Xinyu SaAC2.2 Lee, Dong-Jae TuAT6.1 Li, Xinyu SaBC3.2 Lee, Dong-Jae TuAT6.1 Li, Xinyu SaBC3.2 Lee, Hyeong Yun SuBM6.2 Li, Xinyu SaBC3.2 Lee, Jaeho SuBM6.3 Li, Yang MoAM2.5 Lee, Jaeho SuBM6.3 Li, Yang MoAM2.5 Lee, Jun-Ho TuAT4.6 Li, Yang MoAM2.5 Lee, Jun-Ho TuAT4.6 Li, Yang MoAM2.5 Lee, Lone Hay TuBT2.2 Lee, Holm Sook MoBM5.3 Li, Yang MoAM2.5 Lee, Jaeho SuBM6.1 Li, Yang MoAM2.5 Lee, Jaeho SuBM6.3 Li, Yang MoAM2.5 Lee, Jaeho SuBM6.1 Li, Yibin SaAC2.1 Lee, Maolin TuCT4.3 Li, Yibin SaAC2.1 Lee, Maolin TuCT4.3 Li, Yibin SaAC2.1 Lee, Maolin TuCT4.6 Li, Zinou MoBM6.1 Lenantson, Bengt SuBM6.1 Li, Yibin SaAC2.1 Lee, Maolin TuCT2.6 Liang, Bin TuBT2.1 Lee, MoBM6.1 Li, Zinou MoBM6.2 Lenantson, Bengt SuBM6.1 Li, Zinou MoBM6.2 Lenantson, Bengt SuBM6.1 Li, Zinou MoBM6.4 Lenantson, Bengt SuBM6.1 Li, Zinou MoBM6.4 Lenantson, Bengt SuBM6.1 Li, Zinou MoBM6.4 Lenantson, Bengt SuBM6.1 Li, Zinou MoBM6.2 Lenantson, Bengt SuBM6.1 Li, Zinou MoBM6.2 Lenantson, Bengt SuBM6.1 Li, Zinou MoBM6.2 Lenantson	· ·			
MoBMM-3				
Lai, Kuan-Chou SuAM2 4 Li, Wang SaAC3.2 Land, Kathrin Sophie TuCT1.1 Li, Wenfeng TuAT1 Landgraf, Christian SuAM3.2 Li, Xiang TuAT3.6 Landgraf, Christian SuAM3.2 Li, Xiang TuAT3.6 Langara, Jeppe MoBM3.6 Li, Xiang TuAT3.6 Lanzarone, Ettore MoAM7.6 SuCC3.5 Lau, Billy Pik Lik MoAM4.2 Li, Xiangvun SuCC3.5 Lau, Billy Pik Lik MoAM4.2 Li, Xiangvun SuCC3.5 Laub, Kevin TuBT3.3 Li, Xiaoou SuP11 Ledermann, Christoph TuCT2.6 TuCT5.6 TuCT5.6 TuCT5.6 TuAT6 Li, Xinyu SaAC2.2 Lee, Chia-Yen SuBM6.2 Li, Xilin SuAM7.2 Lee, Chia-Yen SuBM6.2 Li, Xinyu SaAC2.2 Lee, Dong Jae TuAT6.1 Li, Xinyu SaBC3.5 Lee, Dong Jae TuGT5.1 SuCC2.2 Lee, Hyeong Yun SuBM6.3 Li, Yang MoAC2.3 Lee, Jun-Ho TuGT4.6 Li, Yang MoAC2.5 Lee, Jun-Ho TuGT4.6 Li, Yang MoAC2.5 Lee, Jun-Ho TuGT4.6 Li, Yang MoCC2.4 Lee, Jun-Ho TuGT5.1 SuCC2.2 Lee, Jun-Ho TuGT4.3 Li, Yang MoCC2.4 Lee, Jun-Ho TuGT5.1 Jugan TuGT5.1 Lee, Min Seok MoBM5.3 Li, Yang MoCC2.4 Lee, Jun-Ho TuGT4.3 Li, Yang MoCC2.4 Lee, Jun-Ho SaAC3.1 Li, Yilin SaAC2.1 Lee, Maloin TuCT4.3 Li, Yang MoCC2.4 Lee, Jun-Ho SaAC3.1 Li, Yilin SaAC2.1 Lee, Jun-Ho SaAC3.1 Li, Yilin SaAC2.1 Lee, Maloin TuCT4.3 Li, Yongxiang SaBC3.8 Lenain, Roland SuBM6.1 Li, Yangun TuGT5.1 Lee, Maloin TuCT4.3 Li, Yongxiang SaBC3.8 SuBM5.1 Li, Yangun SuBM6.1 Lenainston, Bengt SaWAM1.1 Lengagne, Sebasten MoBM6.2 Li, Zhaou MoCC2.3 TuCT2.6 Liang, Bin TuGT4.6 Leng, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuGT4.6 Leng, Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuGT4.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuGT4.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuGT4.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Muxuan MoCC2.3 TuCT2.6 Liang, Sin TuGT4.5 Li, Bangcheng SaAC2.6 Likhechev, Maxim MoBM6.2 Li, Chengou SaAC	Labbani-Igbida, Ouiddad			
Lal, Amos SuBM7.1 Li, Wenfeng TUAT1 Land, Kathrin Sophie TuCT1.1 Li, Wang TUAT1 Langas, Jappe MoBM3.6 Li, Xiang TUAT3.6 Langas, Jappe MoBM3.6 Li, Xiangdi SuCC3.5 Lan, Billy Pik Lik MoAM.2 Li, Xiangyun SuCC3.3 Leal, Rilly Pik Lik MoAM.2 Li, Xiangyun SuCC3.3 Leadmann, Christoph TuCT2.6 TUT6.6 TUCT5.6 Lee, Brian MoAM3.3 Li, Xilin SuAW.2.2 Lee, Brian MoAM3.3 Li, Xilin SuAW.7.2 Lee, Chla-Yen SuBM6.2 Li, Xinyu SaBC1.2 Lee, Chla-Yen SuBM6.2 Li, Xinyu SaBC1.2 Lee, Dong Jae TuAT6 Li, Xinyu SaBC1.2 <t< td=""><td></td><td></td><td></td><td></td></t<>				
Land, Kathrin Sophie				
Landgaf, Christian SuAM3.2 Li, Xiang TAU73.6 Langaa, Jeppe MoBM3.6 Li, Xiangfei SuCC3.5 Lanzarone, Ettore MoAM7.6 SuCC3.5 Lanzarone, Ettore MoAM7.6 SuCC3.5 Lanzarone, Ettore MoAM4.2 Li, Xiangrun SuCC3.3 Leahy, Kevin TuBT3.3 Li, Xiaoou SuP1.1 Ledermann, Christoph TuCT2.6 TuCT2.6 TuCT5.6 TuCT5.7 TuA76 Li, Xinyu SaAC2.2 TuA76 Li, Xinyu SaAC2.2 TuA76.1 Li, Xinyu SaAC2.2 SuCC2.1 TuA76.1 Li, Xinyu SaBC3.5 SuCC2.2 SuCC2.1 SuCC2.1 SuCC2.1 SuCC2.1 SuCC2.1 SuCC2.1 SuCC2.1 SuCC2.1 SuCC2.2 SuCC2.2 SuCC2.2 SuCC2.2 SuCC2.3 SuCC2.3 SuCC3.4 SuC5.4 SuCC3.4 Su				
Langal, Jeppe				
Lany Survey				
Lau, Billy Pik Lik MoAM4.2			Li, Xiangfei	
Leahy, Kewin			1 : V:	
Ledermann, Christoph	, ,		. 0,	
TuCT2.6			LI, XIAOOU	
Lee, Brian	Ledermann, Christoph			
Lee, Chia-Yen	Los Prien			
TuA16			Li Vilin	
TuAT6	Lee, Cilia-Tell			
TuAT6.1				
Lee, Dong Jae				
Lee, Dongheui	Lee Dong Jae		Li, Alliyu	
TuCT5.1				
Lee, Jaeho SuBM6.1 MoCC3.4 Lee, Jaeho SuBM6.3 Li, Yang MoAM2.5 Lee, Jun-Ho TuAT4.6 Li, Yang MoDC2 Lee, Loo Hay TuBT2.2 TuAT5 Lee, Min Seok MoBM5.3 Li, Yanwen TuBT2.1 Lee, Min Seok MoBM6.1 Li, Yibin SaAC2.1 Lee, Wei Lian William SaAC3.1 Li, Yifeng TuAT2.1 Lei, Maolin TuCT4.3 Li, Yongxiang SaBC3.6 Lenian, Roland SuBM5.1 SuBM7.4 MoBM6.2 Lenian, Roland SuBM5.1 MoBM6.2 Li, Zhaofu SuCC2.1 Lennartson, Bengt SaWAM1.1 MoBM6.2 Li, Zhiwa SuCC2.1 Lennartson, Bengt SuIP Li, Zhiwa MoCC2.3 SuIP.1 Li, Zhiwa MoCC2.3 TuPL Li, Zhiwa MoCC2.3 TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Muxuan MoBM6.2 Levilevre, Laurent MoBM6.2 Liang,	Lee, Dongneui			
Lee, Jaeho SuBM6.3 Li, Yang MoAM2.5 Lee, Lon Ho TuAT4.6 Li, Yang MoDC2 Lee, Loo Hay TuBT2.2 TUAT5 Lee, Min Seok MoBM5.3 Li, Yanwen TUBT2.1 Lee, Tae-Eog SuBM6.1 Li, Yibin SaAC2.1 Lee, Wel Lian William SaAC3.1 Li, Yifeng TuAT2.1 Lei, Maolin TuCT4.3 Li, Yongxiang SaBC3.6 Lei, Maolin TuCT4.3 Li, Yongxiang SaBC3.6 Lenin, Roland SuBM5.1 MoBM6.1 SuBM7.4 Lengagne, Sebastien MoBM6.2 Li, Zhafu SuCC2.1 Lennartson, Bengt SuIP Li, Zhihao SuBCAP.3 SuIP Li, Zhiwu MoCC3.4 TuCT2 Li, Zhiwu MoCC2.3 TuCT2.6 Liang, Bin SuCC1.5 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuAT7.6 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.2 Li, Ang SuAM7.1 Liang, Weihang	Lee Hyeong Vun			
Lee, Jun-Ho TuAT4.6 Li, Yang MoDC2 Lee, Loo Hay TuBT2.2 TuAT5 Lee, Min Seok MoBM5.3 Li, Yanwen TuBT2.1 Lee, Min Seok SuBM6.1 Li, Yibin SaAC2.1 Lee, Wei Lian William SaAC3.1 Li, Yongxiang SaBC3.6 Lei, Maolin TuCT4.3 Li, Yuxuan SuBM7.4 Lenian, Roland SuBM5.1 Li, Zhaofu SuBM6.1 Lengagne, Sebastien MoBM6.2 Li, Zhaofu SuCC2.1 Lennartson, Bengt SuIP.1 Li, Zhiwu MoCC3.4 SuIP.1 Li, Zhiwu MoCC2.1 TuCT2 Li, Zhiwu MoCC2.1 TuCT2.6 Liang, Bin SuCC1.5 TuCT2.6 Liang, Bin TuAT7.6 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TalWang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bongcheng SaBC3.4 Liang, Weihang TuAT3.6 <td></td> <td></td> <td>Li Vang</td> <td></td>			Li Vang	
Lee, Loo Hay TuBT2.2 TuAT5 Lee, Min Seok MoBM5.3 Li, Yanwen TuBT2.1 Lee, Tae-Eog SuBM6.1 Li, Yibin SaAC2.1 Lee, Wei Lian William SaAC3.1 Li, Yifeng TuAT2.1 Lei, Maolin TuCT4.3 Li, Yuxuan SuBM5.6 Lenian, Roland SuBM5.1 MoBM6.1 MoBM6.1 Lenain, Roland SuBM5.1 MoBM6.2 Li, Zhaofu SuCC2.1 Lennartson, Bengt SaWAM1.1 McCC3.4 SuCC2.1 Lennartson, Bengt SuIP Li, Zhinao SuBCAP.3 SuIP.1 Li, Zhiwu McCC2.1 TuCT2 Li, Zhiwu McCC2.3 TuCT2.6 Liang, Bin SuCC3.2 TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuBT1.4 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Bon TuAT1.5 Liang, Wenliang				
Lee, Min Seók MoBM5.3 Li, Yanwen TuBT2.1 Lee, Tae-Eog SuBM6.1 Li, Yifeng TuAT2.1 Lee, Wei Lian William SaAC3.1 Li, Yifeng TuAT2.1 Lei, Maolin TuCT4.3 Li, Yongxiang SaBC3.6 Lenian, Roland SuBM5.1 MoBM6.1 Lengagne, Sebastien MoBM6.2 Li, Zhaofu SuCC2.1 Lennartson, Bengt SaWAM1.1 MoCC3.4 SuIP Li, Zhihao SuBCAP.3 SuIP.1 Li, Zhiwu MoCC3.4 SuIP.1 Li, Zhiwu MoCC2.1 TuCT2 Li, Zhiwu MoCC2.3 TuCT2.6 Liang, Bin SuCC3.2 TuCT2.6 Liang, Bin SuCC1.5 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuAT7.6 Lequievre, Laurent MoBM6.2 Liang, Muxaan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuBAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4	· · · · · · · · · · · · · · · · · · ·		EI, Failig	
Lee, Tae-Eog SuBM6.1 Li, Yibin SaAC2.1 Lee, Wei Lian William SaAC3.1 Li, Yifeng TuAT2.1 Lei, Maolin TuCT4.3 Li, Yongxiang SaBC3.6 Len Janin, Roland SuBM5.1 MoBM6.1 SuBM7.4 Lengagne, Sebastien MoBM6.2 Li, Zhaofu SuCC2.1 Lennartson, Bengt SaWAM1.1 MoCC3.4 SuBCAP.3 SuIP.1 Li, Zhilhao SuBCAP.3 SuIP.1 Li, Zhiwu MoCC2.3 TuCT2 Li, Zhiwu MoCC2.3 TuCT2.6 Liang, Bin SuCC3.2 TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuBT1.4 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuBC3.4 Liang, Weihang TuAT3.6 Li, Bohao TuAT1.5 Liang, Weihang TuAT3.6 Li, Bohao TuAT4.5 Liang, Zhimin MoAM			Li Yanwen	
Lee, Wei Lian William SaAC3.1 Li, Yifeng TuAT2.1 Lei, Maolin TuCT4.3 Li, Youxuan SuBM5.6 TuCT4.3 Li, Yuxuan SuBM7.4 Lenain, Roland SuBM5.1 MoBM6.1 Lengagne, Sebastien MoBM6.2 Li, Zhaofu SuCC2.1 Lennartson, Bengt SaWAM1.1 MoCC3.4 MoCC2.4 SuIP Li, Zhiwa MoCC2.4 SuIP.1 Li, Zhiwu MoCC2.1 TuPL Li, Zhuolun SuCC3.2 TuCT2 Li, Zhuolun SuCC3.2 TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuAT7.6 Lequievre, Laurent MoBM6.2 Liang, Bin TuBT1.4 Li, Ang SuAM7.1 Liang, Weihang SaAC1.4 Li, Ang SuBM7.1 Liang, Weihang TuAT3.6 Li, Boac TuAT1.5 Liang, Weihang TuAT3.6 Li, Bohao TuAT1.5 Liang, Yan TuAT1.6 Li, Chengxi SaBC1.1				
Lei, Maolin TuCT4.3 TuCT4.3 TuCT4.3 Li, Yuxuan SaBC3.6 SuBM7.4 SuBM7.4 SuBM7.4 Lenain, Roland SuBM5.1 MoBM6.2 Li, Zhaofu SuCC2.1 MoCC3.4 SuCC2.1 MoCC3.4 SuP.1 SuJP.1 Li, Zhiwu SuCC2.1 MoCC3.4 MoCC3.4 SuBCAP.3 SuJP.1 Li, Zhiwu MoCC3.4 MoCC2.1 MoCC2.1 MoCC2.1 TuCT2 Li, Zhiwu MoCC2.1 MoCC2.2 MoCC2.1 MoCC2.2 TuCT2.6 Liang, Bin SuCC3.2 TuCT2.6 Liang, Bin SuCC3.2 TuCT3.6 Liang, Bin TuAT7.6 TuCT3.6 Liang, Bin TuAT7.6 TuBT1.4 TuCT3.6 Liang, Muxuan MoBM6.5 MoBM6.5 MoBM6.5 MoCC2.1 Liang, Muxuan MoBM6.5 MoBM				
TuCT4.3	· · · · · · · · · · · · · · · · · · ·			
Lenain, Roland SuBM5.1 MoBM6.2 Li, Zhaofu SuCC2.1 Lennartson, Bengt SaWAM1.1 MoCC3.4 SuIP Li, Zhihao SuBCAP.3 SuIP.1 Li, Zhiwu MoCC2.1 TuPL Li, Zhiwu MoCC2.3 TuCT2.6 Liang, Bin SuCC3.2 TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuAT7.6 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Weihang TuAT3.6 Li, Bohao TuAT1.5 Liang, Yan TuAT4.2 Li, Chen TuAT4.5 Liang, Yan TuAT4.2 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengxong MoC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 </td <td>,</td> <td></td> <td></td> <td></td>	,			
Lengagne, Sebastien MoBM6.2 Li, Zhaofu SuCC2.1 Lennartson, Bengt SaWAM1.1 MoCC3.4 SuIP Li, Zhihao SuBCAP.3 SuIP.1 Li, Zhiwu MoCC2.1 TuPL Li, Zhiwu MoCC2.3 TuCT2 Li, Zhuolun SuCC3.2 TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuBT1.4 Lequievre, Laurent MoBM6.2 Liang, Bin TuBT1.4 Li, Ang SuAM7.1 Liang, Weihang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Weihang TuAT3.6 Li, Bo TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Yan TuAT1.6 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoC2.1 Liao, Min TuAT2.2 Li, Chenhong	Lenain, Roland		•	MoBM6.1
Lennartson, Bengt SaWAM1.1 SuIP Li, Zhihao SuBCAP.3 SuBCAP.3 SuIP.1 Li, Zhiwu MoCC3.4 MoCC2.1 TuPL Li, Zhiwu MoCC2.3 TuCT2 Li, Zhiwu MoCC2.3 SuCC3.2 TuCT2.6 Liang, Bin SuCC1.5 TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuBT1.4 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Weihlang SuCC1.1 Li, Bohao TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chengxi SaBC1.1 Liang, Zhimin MoAM4.5 Li, Chengxong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Donghui SaAC2.3 <t< td=""><td></td><td>MoBM6.2</td><td>Li, Zhaofu</td><td>SuCC2.1</td></t<>		MoBM6.2	Li, Zhaofu	SuCC2.1
SulP.1 Li, Zhiwu MoCC2.1 TuPL Li, Zhiwu MoCC2.3 TuCT2 Li, Zhiwu MoCC2.3 TuCT2.6 Liang, Bin SuCC3.2 TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuBT1.4 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Wenliang SuCC1.1 Li, Bo TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Xiao TuAT1.6 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoC2.1 Liao, Min TuAT2.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Donghui SaAC2.3 Lin, Chengran TuAT1.3	Lennartson, Bengt	SaWAM1.1		MoCC3.4
TuPL Li, Zhiwu MoCC2.3 TuCT2 Li, Zhuolun SuCC3.2 TuCT2.6 Liang, Bin SuCC1.5 TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuBT1.4 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Wenliang SuCC1.1 Li, Bo TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengzong MoC2.1 Liao, Jing-Yan SuBM2.6 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Donghui SaAC2.3 Lim, Yi TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran	-	SulP	Li, Zhihao	SuBCAP.3
TuCT2 Li, Zhuolun SuCC3.2 TuCT2.6 Liang, Bin SuCC1.5 TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuBT1.4 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Weelliang SuCC1.1 Li, Bo TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Daofei TuAT1.4 Lin, Chengran TuAT1.3		SulP.1		MoCC2.1
Leong, Kristor Leong Jie Kai TuCT2.6 Liang, Bin SuCC1.5 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuBT1.4 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Wenliang SuCC1.1 Li, Bo TuAT1.5 Liang, Wenliang SuCC1.1 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Dongfui SaAC2.3 Lim, Yi TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3		TuPL	Li, Zhiwu	MoCC2.3
Leong, Kristor Leong Jie Kai TuCT2.6 Liang, Bin TuAT7.6 Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuBT1.4 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Wenliang SuCC1.1 Li, Bo TuAT1.5 Liang, Wenliang SuCC1.1 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3				SuCC3.2
Leong, Kristor Leong Jie Kai TuCT3.6 Liang, Bin TuBT1.4 Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Wenliang SuCC1.1 Li, Bo TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Doofei TuAT1.5 Lim, Yi TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3		TuCT2.6	Liang, Bin	SuCC1.5
Lequievre, Laurent MoBM6.2 Liang, Muxuan MoBM6.5 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Wenliang SuCC1.1 Li, Bo TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3		TuCT2.6	Liang, Bin	TuAT7.6
Lequievre, Laurent MoBM6.2 Liang, TaiWang SaAC1.4 Li, Ang SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Wenliang SuCC1.1 Li, Bo TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3	Leong, Kristor Leong Jie Kai	TuCT3.6	Liang, Bin	TuBT1.4
Li, Ång SuAM7.1 Liang, Weihang TuAT3.6 Li, Bangcheng SaBC3.4 Liang, Wenliang SuCC1.1 Li, Bo TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chendrong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3		TuCT3.6		MoBM6.5
Li, Bangcheng SaBC3.4 Liang, Wenliang SuCC1.1 Li, Bo TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3				
Li, Bo TuAT1.5 Liang, Xiao TuAT1.6 Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 TuAT1.3				
Li, Bohao TuAT4.5 Liang, Yan TuAT4.2 Li, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 TuAT1.3				
Lİ, Chen TuBT7.1 Liang, Zhimin MoAM4.5 Li, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3				
Lİ, Chengxi SaBC1.1 Liao, Jing-Yan SuBM2.6 Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3	· · · · · · · · · · · · · · · · · · ·			
Li, Chengzong MoCC2.1 Liao, Min TuAT2.1 Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3				
Li, Chenhong MoDC2.3 Liarokapis, Minas SaWAM4.1 Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3				
Li, Congbo SaAC2.6 Likhachev, Maxim MoBM4.4 Li, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3				
LÍ, Daofei TuAT1.5 Lim, Yi TuCT3.6 Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3				
Li, Donghui SaAC2.3 TuCT3.6 Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3				
Li, Haifeng TuAT1.4 Lin, Chengran TuAT1.3			Lim, Yi	
			Line Oheamann	
LI, Haoyu SuCC1.2 LIN, Chin-Yi MoAM7.5				
	ы, паоуи	SuCC1.2	LIII, UIIII-TI	d.7 IVIAOIVI

Lin, Chin-Yi	TuBT7.6		MoBM1.1
Lin, Chin-Yi	TuCT5.5	Liu, Yunan	MoCC3.2
	TuCT5.5	Liu, Yuxin	MoCC1.4
Lin, He	TuAT1.6	Liu, Zheng	TuAT2.1
Lin, Kuo-Ping	TuAT6	Liu, Zhengtao	MoCC3.1
	TuAT6.3	Liu, Zhihao	SaBC1.3
	TuAT6.4	Liu, Zuozhu	TuAT3.4
Lin, Kuo-Yi	TuAT4	Lizarraga, Adrian	TuBT1.3
	TuAT4.1	Lizarralde, Fernando	SuAM1.6
Lin, Shiyuan	SuCC3.2	Lizarralde, Nicolas	SuAM1.6
Lin, Yu-Chuan	SuAM2.4	Loffredo, Alberto	MoAM7.6
Lin, Yujun	SaBC2.3	Long, Derek	SuBM3.1
Linde, Glenn	TuCT7.1	Lou, Yunjiang	SaAC1.3
, -	TuCT7.1	Loukianov, Alexander G.	TuBT1.1
Lindner, Felix	SuBM3.1	Low, Thomas	MoBM1.6
Liu, Bin	SuWCC2.1	Lozada-Castillo, Norma	TuCT3.5
Liu, Chenang	SuBM7.4	,,	TuCT3.5
,g	MoBM6	Lu, Jianfeng	TuAT6.6
	MoBM6.1	Lu, Meng-Xiu	SuBM6.2
	TuBT6.1	Lu, Qi	SuCC3.3
Liu, Chengju	SuCC2.3	Lu, Yan	SuAM1.4
Liu, Chuangwei	SuCC2.3	Lu, Tan	SuAM1.5
Liu, Chuangwei Liu, Dong	SuCC3.5	Lu Vugion	SuBM6.5
		Lu, Yuqian	
Liu, Fang	SaBC1.5		TuAT4
Liu, Gaiyun	MoCC2.4		TuCT3
Liu, Guangjun	TuCT7.4		TuCT3
	TuCT7.4	Lucia, Walter	MoAM1.6
Liu, Hongju	MoDC1.2	Luensch, Dennis	SuAM2.2
Liu, Houde	SuCC1.5	Luh, Peter	SaWAM1.1
	TuBT1.4		SuBCAP
Liu, Huixiang	SuCC2.4		MoAM5.3
Liu, Jiayi	SuBCAP.3	Luo, JianChao	SaBC2.6
Liu, Juan	SaBC1.4	Luo, Jun	MoCC1.4
Liu, Kaibo	MoBM6.4	Luo, Rui	TuAT7.3
Liu, Kun	MoAM2.2	Luo, Shan	MoAw2S.3
Liu, Lianqing	TuCT6.2	Luo, Xue	SaAC2.5
	TuCT6.2	Luong, Tuan	TuCT1.5
Liu, Lingchen	SaBC2.5	Lurz, Henrik	MoBM4.2
	MoDC2.2	Lutz, Tim	TuBT7.3
Liu, Maoding	MoDC2.1	Luviano-Juarez, Alberto	TuCT3.5
Liu, Min	MoBM7.5		TuCT3.5
Liu, Mingwei	SuAM5.5	Lv, Jianhao	SaAC2.2
Liu, Ran	MoAM4.2	Lyu, Hao	TuAT1.5
•	MoBM3.1	Ma, Hang	TuBT2.3
Liu, Ran	MoDC1.3	Ma, Ke	TuAT3.2
Liu, Rui	SaAC1.3	Ma, Longzhou	TuBT3.4
Liu, Shimin	SaAC3.4	Ma, Mingsheng	MoDC2.3
Liu, Sibo	SaBC2.3	Ma, Nachuan	SuCC2.3
Liu, Song	TuAT2.4	Ma, Qian	TuAT1.3
Liu, Tao	TuCT4.5	Ma, Xin	TuAT2.6
Eld, 1d0	TuCT4.5	Ma, Yangin	TuAT2.4
Liu, Tieming	MoAw1H.2	Ma, Yunlong	MoBM7.5
Liu, Ting	MoAM2.1	Madonski, Rafal	TuCT3.5
Liu, Ting Liu, Tong	SuAM5.5	maconom, rada	TuCT3.5
Liu, Wandong	SaBC1.5	Madsen, Steffen	MoAM4.4
Liu, Wenhang	TuAT7.5	Maitra, Madhubanti	MoBM4.5
Liu, Wenxin	TuBT3	Malinowski, Karyn	MoAM6.6
Liu, vvenxin	TuBT3.6	· · · · · · · · · · · · · · · · · · ·	TuAT1
Liu Vin Jun		Mangini, Agostino Marcello	
Liu, Xin-Jun	SuCC1.4	Manuafald Nila	TuAT1.2
Liu, Xinyu	SuCC1.6	Mansfeld, Nico	TuCT2.2
Liu, Xuedong	SaBC1.2	Marangoz, Salih	SuAM6.1
Liu, Yang	SuCC2.4	Maric, Bruno	TuCT2.1
Liu, Yang	MoCC1.4	Marjollet, Mairtin	TuCT2.3
Liu, Ying	SaAC1.6	Markham, Georgia	SuAM5.4
	SaBC1	Martin, Mario	SuBM4.2
	TuAT4	Martini, Mauro	SuAM6.2
	TuAT4	Masip, Agnes	TuCT5.6
	TuAT4.2		TuCT5.6
Liu, Yingqiang	TuCT4.4	Masmitja, Ivan	SuBM4.2
	TuCT4.4	Matsui, Takaharu	SuAM2.5
Liu, Yongkui	SaBC1	Matta, Andrea	MoAM7.6
Liu, Yu	SaBC3	Mauck, Kerry	MoAM6.5
Liu, Yuanchang	SuBM4.3	Mayr, Matthias	MoBM5.4
Liu, Yugang	MoBM1	McGovern, Sean	MoBM5.6
		•	

McGregor, Davis	TuAT3.4	Nishi, Tatsushi	TuCT5.2
McKeever, Kenneth	MoAM6.6		TuCT5.2
		Nieleinerune Werlei	
McMahon, James	SuBM4.1	Nishimura, Yuki	MoAM7.1
Medrano Yax, Juan Fernando	TuCT1.5	Niu, Hanbing	MoAM4.6
Meghjani, Malika	TuBT5.3	Nonaka, Youichi	SuAM2.5
Mehman Sefat, Amir	SuAM4.2	Nousias. Sotirios	MoBM1.5
		,	
Mehta, Ishaan	MoAM5	Novoseller, Ellen	MoAM3.6
	MoAM5.5	Nuñez, Lorena	SuBM2.2
Mei, Famao	MoAM2.4	Ocker, Felix	SuAM2.3
Meijia, Wang	MoAM2.3	Ogata, Tetsuya	SuBM3.6
, , ,			
Menegozzo, Giovanni	TuBT6.2	Ohno, Kazunori	SuAM5.3
Meng, Deshan	TuAT7.6		SuBM2.1
Meng, Jiawei	SuBM4.3	Okada, Yoshito	SuAM5.3
Meng, Xiangyu	SuAM6	ondad, roomic	SuBM2.1
Meng, Alangyu		011 1111 14 1	
	SuAM6.3	Oligschläger, Marius	SuAM2.3
Meng, Yongqi	MoBM2.1	Olofsson, Bjorn	TuCT2.4
	MoBM2.3	Öncü, Ahmet	MoAM5.4
Menon, Rohit	SuAM6.1	Orsag, Matko	MoAM6.2
		Orsay, Walko	
Mettu, Ramgopal	SuAM1		TuCT2.1
	SuAM1.3	Ouyang, Linhan	SaBC3.1
Meyer, Joel	SuBM5.4	Oztop, Erhan	SuBM3.5
Mezouar, Youcef	SuBM5.1	Padir, Taskin	TuAT7.3
Mezodai, Toucei			
	MoBM6.2	Paillacho, Dennys	SuBM4.5
Mezura-Montes, Efren	SuBM5.2	Pan, Chunrong	MoCC2.2
Mghames, Sariah	SuAM6.5	Pan, Hao	TuAT1.5
Mi, Zetian	SuCC1.6		MoCC1.1
		Pan, Jinyan	
Mikuni, Yoshitaka	TuBT6.4	Pan, Peng	SuCC1.6
Mingjie, Lin	MoBM3.2	Pan, Zengxi	SaWBM2.1
Minsoo, Kim	SuBM6.4	Pandya, Harit	MoBM2.2
Mitra, Sayan	TuCT3.2	Pang, Bowen	MoDC1.3
	TuCT3.2	Pang, YatMing	SaBC1.1
Mittal, Vedansh	MoBM2.2	Panitch, William	MoBM1.6
Mochiyama, Hiromi	MoAM7.1	Pantano, Matteo	TuCT5.1
		i antano, iviatico	TuCT5.1
Moctezuma Flores, Miguel	SuBM2.2		
Moench, Lars	TuAT5.1	Paolillo, Antonio	SuBM3.2
	TuCT3	Paprotny, Igor	SuAM7.3
	TuCT3	Parikh, Rishi	SuBCAP.5
		r arman, raom	
	TuCT3.4		MoAM3.6
	TuCT3.4	Parisio, Alessandra	MoAM5.6
Mohanta, Jayant Kumar	TuBT4.2	Park, Jaeyoung	MoBM6.5
Möller, Daniel	SuBM4.4	Paschke, Udo	SuAM3.2
Moon, Hyungpil	TuCT1.5	Patel, Bhavika	MoAw1H.3
Moreno-Centeno, Erick	MoAM3.1	Pathmakumar, Thejus	TuCT3.6
Moreno-Guzman, Francisco	SuAM7.4		TuCT3.6
Morgan, Andrew	MoAM4.3	Paulius Ramos, David	TuBT3
		r adild3 rtairio3, David	
Moulouel, Koussaila	TuBT3.1		TuBT3.2
Mucchiani, Caio	TuBT1.2	Paz, David	SuBM2.6
Mukherjee, Sandeep	SuBCAP.5	Pei, Zhi	MoCC1.6
Mun, Ye-Ji	TuAT3.6	·	MoDC2
· · · · · · · · · · · · · · · · · · ·			
Murphey, Todd	SuBM5.4		MoDC2
Nakadai, Shinji	MoBM3.5		MoDC2.4
Nakagawa, Yuto	TuCT6.5		TuAT5
.	TuCT6.5	Peng, Po Hsiang	TuBT7.6
Nakano, Takahiro	SuAM2.5	· · · · · · · · · · · · · · · · · · ·	SaBC1
		Peng, Tao	
Nandi, Gora Chand	TuBT4.4		MoCC3
Nandiraju, Gireesh	MoAM3.2		MoCC3.5
* *	MoBM3.4	Peng, Xi	MoCC1.1
Nardi, Luigi	MoBM5.4	Peng, Xiaomeng	MoAw2S.2
Navarro, Joan	SuBM4.2	Peng, Yijie	MoCC1
Nazari, Ali A.	TuBT1.6		MoCC1
Ndiaye, Yande	SuAM1.4		MoCC1.3
Negenborn, R.R.	SuCC3.1	Peng, Yun	SuCC2.3
•			
Negrete, Marco	SuBM2	Perisic, Milica	SuAM1.4
	SuBM2.2	Perrusquia, Adolfo	SuBM4
Nemec, Bojan	MoBM5		MoBM7
, ,	MoBM5.5		MoBM7.1
Navasan Fra Maria		Determent Hermile Constant	
Neumann, Eva-Maria	TuCT1.3	Petersen, Henrik Gordon	MoAM4.4
Nguyen-Cong, Trinh	TuCT3.1	Petric, Frano	TuCT2.1
- · · · ·	TuCT3.1	Petrovic, Tamara	MoAM6.3
Ni Shiying			
Ni, Shiying	SuCC3.4	Pfeiffer, Nicholaus	MoAw1H.3
Ni, Tianle	MoBM7.5	Pham, Quang-Cuong	TuAT2.5
Nicherala, Yaswanth Kumar	MoBM2.4	Picard, Guillaume	SuBM5.1
Nikolaidis, Stefanos	TuBT5.5	Pichard, Alexandre	SuBCAP.1
Nino, Jose	SuBM1.2	Pieters, Roel S.	SuAM4.2

Pinosky, Allison	SuBM5.4	Robba, Michela	TuAT1
Plaku, Érion	SuBM4.1	Robertsson, Anders	TuCT2.4
Plasberg, Carsten	TuCT1.2	Robson, Mark	SuAM3.6
Polic, Marsela	MoAM6.2	Roccotelli, Michele	TuAT1.2
Ponomareva, Polina			
	SuBM3.3	Roennau, Arne	TuCT1.2
Popa, Dan	MoAM1.3		TuCT1.6
Potapov, Andrei	SuAM3.5	Roy, Debayan	TuCT5.4
Poudel, Laxmi	SuAM2.5		TuCT5.4
Prakash, Ravi	TuBT4	Roy, Dibyendu	MoBM4
,	TuBT4.2	, ,	MoBM4.5
Presten, Mark	SuBCAP.5	Roychoudhury, Ruddra dev	MoBM3.4
Proia, Silvia	TuBT4.5	Rubichi, Sandro	TuCT7.5
		Rubiciii, Sailuio	
Pu, Tanhong	SuCC1.2	5 5	TuCT7.5
	TuAT3.3	Rubio, Laura Elena	TuBT5.1
Pupo, Francesco	SuBM1.4	Ruggiero, Fabio	TuCT4.3
Qiao, Fei	SaBC1		TuCT4.3
	SaBC1.4	Rupprecht, Bernhard	TuBT6.3
Qiao, Fei	SuCC1	Russell, Matthew	MoBM7.2
Qiao, i ci	SuCC1.4	Sabas, Juan Francisco	MoAM3
Olean Fail		Sabas, Juan Francisco	
Qiao, Fei	SuCC2.6		MoBM2
Qiao, Yan	SuWCC2.1		TuBT3.5
	MoCC2	Sabattini, Lorenzo	TuCT7.5
	MoCC2		TuCT7.5
	MoCC2.3	Saddik, Abdulmotaleb	TuAT2.1
	TuAT5.6	Sadula, Srikrishna	MoBM2.4
Qiao, Yuansong	MoAM3.3		MoAM5.5
		Saeedi, Sajad	
Qimuge, Siqin	SuCC1.4		TuBT1
Qin, Fangbo	SuCC1.1		TuBT1.6
	SuCC2.5	Sakai, Ryo	MoBM2.6
Qin, Jian	SaAC1.4	Sakcak, Basak	TuBT4.6
Qin, Wei	SaAC3	Salapaka, Srinivasa M	TuBT5.4
Q, 175.	SaAC3.1	Salgado, Ivan	SuAM7.4
	SaBC3	Salimzadeh, Ali	MoAM4.1
O. V. II	SaBC3.5	Sallam, Mohamed	SuAM6.4
Qin, Yanding	TuCT6.2	Salt Ducaju, Julian Mauricio	TuCT2
	TuCT6.2		TuCT2.4
Qin, Zhenghong	MoAM4.2	Salvetti, Francesco	SuAM6.2
Qiu, Junyan	MoCC1.4	Sanap, Vipul	MoAw2S.1
Qu, Juntian	SuCC1.6	Sanchez, Edgar N.	TuBT1.1
Quan, Ruiyang	SuCC1.4	Sandhan, Tushar	MoAw2S.1
Qureshi, Mohammad Nomaan	MoBM2.2	Sankavaram, Chaitanya	MoAw2S.1
Raatz, Annika	MoBM4.2	Sankhla, Harshit Kumar	MoBM2.2
Rababa, Salahaldeen	MoBM6.6	Santos Miguel, Orozco Soto	MoBM1.4
Rahtu, Esa	SuAM4.2	Sarazin, Marianne	SuBM7.3
Raj, Prem	MoAw2S.1	Saripalli, Srikanth	SuAM4.5
Rakotondrabe, Micky	MoAM1.4	Sarkar, Soumyendu	SuBCAP.1
Ramalingam, Balakrishnan	TuCT3.6	Sarukkai, Arya	TuBT7.5
rtamamigam, Daramieman	TuCT3.6	Sato, Shunsuke	MoBM1.2
Ramesh Babu, Ashwin	SuBCAP.1	Satoh, Mineto	MoAM7.2
•			
Ramirez, Antonio	MoIP11	Saunders, Glenn	TuCT6.4
	MoIP11.1		TuCT6.4
	TuBT1.3	Savage, Jesus	SuBM2.2
	TuBT5.1	Savinykh, Alena	SuAM3.5
	TuBT6	Scarabaggio, Paolo	MoAM5.6
Ramirez-Amaro, Karinne	SaWAM1.1	Scherzinger, Stefan	TuCT1
Ramirez-Neria, Mario	TuCT3.5	Contractingor, Ctorum	TuCT1.6
Naminez-Nema, Mano	TuCT3.5	Cohorn Doniel	TuCT3.4
Daniel Maria		Schorn, Daniel	
Ramzy, Nour	TuCT5.6		TuCT3.4
	TuCT5.6	Schwarz, Max	SuBM2.3
Rankins, Ellen	MoAM6.6	Seiler, Konstantin M	SuAM5.4
Ranogajec, Vanja	TuCT2.1	Selvaggio, Mario	TuCT4
Rastegarpour, Soroush	MoAM7.3	33 1	TuCT4
Ratchev, Svetan	MoBM5.2		TuCT4.3
Rathinam, Sivakumar	SuAM7.5		TuCT4.3
		Coo Cunavion	
Rayguru, Madan Mohan	TuCT3.6	Seo, Sungwon	TuCT1.5
	TuCT3.6	Shan, Jinjun	MoBM4
Realpe, Sebastian	MoAM3.4		MoBM4.1
Recker, Tobias	MoBM4.2	Shao, Chenhui	TuAT3.4
Reddinger, Jean-Paul	SuAM7.5	Sharma, Satvik	SuBCAP.5
Ren, Zehua	SuCC2.4	,	MoAM3.6
Reniers, Michel	MoAM5.1	Shen, Fei	SuCC2.5
Rhode, Kawal	MoBM1.5	Shen, Jiyong	MoDC1.6
Riesebos, Robert	MoAM7.4	Shen, Po-Cheng	SuBM6.2
Rizzoli, Andrea Emilio	SuBM3.2	Shen, Siqian	SuBCAP.4

Shen, Weiming	SuCC2.2	Suri, Garvit	TuBT4.4
	MoBM7.5	Svanebjerg, Elo	SuBM1.1
Shen, Xingwang	SaAC3.4	Tadakuma, Kenjiro	SuBM2.1
Shen, Zhen	MoCC1.5	Tadokoro, Satoshi	SuAM5.3
	MoCC3		SuBM2.1
	MoCC3.3	Taghavi, Nazita	MoAM1.3
Shi, Jiangnan	TuBT2.4	Taghipour, Sharareh	MoAM5.5
Shi, Leyuan	TuBT5.2	Takahashi, Shuki	MoAM7.1
Shi, Lu	TuBT1.2	Takahashi, Yoshinobu	SuAM4.3
Shi, Wujie	SuCC3.2	Takase, Ryuichi	SuBM3.6
Shi, Zhongshun	TuBT2	Tan, Kaige	SuAM3.4
	TuBT2.1	Ton II Vuon	SuAM5.5
Chiming Duon	TuBT2.3 MoAw2S.2	Tan, U-Xuan	SuCC1.2 MoAM4.2
Shiming, Duan	TuCT1.5	Tong Livin	
Shin, Jinjae Shirakura, Naoki	SuBM3.6	Tang, Lixin	SaBC2 SuP3L.1
Shmakov, Alexander	SuBCAP.1	Tang, Renzhong	MoCC3.5
Shrivastava, Niharika	TuBT5.3	Tang, Wangchujun	MoCC3.5
Si, Bing	MoBM6	Tang, Wei	MoAM2.6
Si, bing	MoBM6.6	Tang, Yi	MoAM2.4
Si, Weiyong	SuBM5.6	Tang, Ying	MoBM7
Silva Mendoza, Steven Alexander	SuBM4.5	rang, ring	MoBM7.6
Singh, Arun Kumar	TuCT4.6	Tang, Ying	TuBT3.4
Singh, Alun Kumai	TuCT4.6	Tao, Fei	TuAT6.5
Sloth, Christoffer	MoBM3.6	Tao, Lue	SaBC2.2
Siotif, Chilistoffer	TuBT6.5	Tawfick, Sameh	TuAT3.4
Söderberg, Daniel	SuBM4.4	Tchouatat Kepseu, Ivan	SuAM5.1
Son, Youngdoo	MoBM6.3	Teitelbaum, Walter	SuBCAP.5
Song, Dezhen	SuAM3	Tello, Andrés	MoAM7.4
cong, Boznon	SuAM3.1	Thananjeyan, Brijen	MoBM1.6
	SuAM5.6	Thayer, Thomas C.	MoAM5.2
	SuBM1	Theis, Mark	SuBCAP.5
	SuBM1.5	Thomas, Ulrike	SuBM4.6
	MoBM2.5	Thomasson, J. Alex	SuAM5.6
	TuAT1.4	Thurow, Kerstin	TuCT7.2
Song, Jiaxu	SuAM7.2	,	TuCT7.2
3, -	MoAw2S.4	Tilbury, Dawn	SuBCAP.4
Song, Jie	MoDC1	•	SuAM2.5
0 ,	MoDC1		MoBM5.1
	MoDC1.1		TuAT3.5
	MoDC1.2	Timmermann, David	TuCT1.2
Sorour, Mohamed	SuAM6.4	Tirado, Jonathan Andres	SuBM3.4
Soto Guerrero, Daniel	SuBM1.6	Tiriolo, Cristian	MoAM1.6
Sotolongo, Brian	TuBT4.3	Tomizuka, Masayoshi	SuBM5.5
Spasic, Irena	TuAT4.2	Tong, Yanzhang	TuAT4.2
Sridharan, Mohan	SuAM3	Torngren, Martin	SuAM3.4
	SuAM3.6	Toro Santamaria, Ricardo	TuAT3.1
	MoAM3.2	Trevena, William	SuBM7.1
	MoBM3.4	Trinitatova, Daria	SuBM3.3
Srinivas, Kishore	MoBM1.6	Tripicchio, Paolo	MoBM1.3
Srivastava, Amber	TuBT5.4	T D D.	MoBM7.3
Stephant, Joanny	SuBM1.6	Tristán-Rodríguez, Diego	SuBM5.2
Stoll, Johannes T.	SuAM3.2	Trzpit, Thomas	SuBM5.4
Stuhne, Dario	TuCT2.1	Tsai, Tsung-Han	SuAM2.4
Su, Hu	SaAC2.3	Tsai, Yueh-Feng	TuCT5.5
Su, Lijie	SaBC2	Tantanukau Damitru	TuCT5.5
	SaBC2.2 SaBC2.4	Tsetserukou, Dzmitry	SuAM3.5
Cupar Luia Enriqua	TuPL.1		SuBM3.3
Sucar, Luis Enrique Suemitsu, Issei	SuBCAP.6	Tsung, Fugee	SuBM3.4
Sun, Chen	MoCC3.4	Turin, Zoe	TuAT4.4 TuCT4.1
Sun, Mu	MoCC1.5	ruini, zoe	TuCT4.1
Sun, Ning	TuAT1	Turner, Alison	MoBM5.2
Carr, Ming	TuAT1.6	Ude, Ales	MoBM5.5
	TuCT6.2	Ugur, Emre	SuBM3.5
	TuCT6.2	Ulloa Rios, Federico	MoAM1.1
Sun, Wenhuan	MoBM3.3	Ulrich, Philipp	TuCT5.6
Sun, Yanning	SaBC3.5		TuCT5.6
Sun, Yu	SuCC1.6	Umeda, Shota	SuAM2.5
Sun, Yu	MoCC2.4	Urrutia Avila, Kevin	MoAM6.5
Sun, Yu	TuBT3	Utsugi, Kei	SuBCAP.6
•			TuCT3.3
	TuBT3.2	Uzsoy, Reha	14010.0
Sun, Yuting	TuAT5.2	Ozsoy, Rena	TuCT3.3
Sun, Yuting Sung, Kisuk		Vaidyanathan, Shankara Narayanan	

Valarezo Añazco, Edwin	TuCT1.5	Wang, MengYing	SaBC2.1
van Eekelen, Joost	MoAM5.1	Wang, Michael Yu	SuP1L.1
Vaska, Nathan	TuBT3.3	Wang, Ning	SuBM5.6
Vatsal, Vighnesh	TuAT7	Wang, Peng	MoBM7.2
	TuAT7.2	Wang, Peng (Edward)	SuAM4.6
Venkataraman, Prasanna Shrinivas	MoBM2.4	Wang, Qing	MoDC1.6
Verdezoto Dias, Nervo Xavier	SuBM4.5	Wang, Qingbin	SaAC2.3
Vertechy, Rocco	MoBM1.3	Wang, Renjie	SuCC1.6
Villani, Valeria	TuCT7.5	Wang, Shaohu	SuCC2.5
	TuCT7.5	Wang, Shuang	MoBM7.5
Viswanath, Vainavi	MoAM3.6	Wang, Shuoyu	TuCT4.5
Vogel-Heuser, Birgit	SuAM2.3		TuCT4.5
	SuAM2.6	Wang, Tan-Ju	TuCT5.5
	MoP1L.1		TuCT5.5
	MoAM7.5	Wang, Tao	SaAC1.4
	TuBT6.3		SuCC1.3
	TuCT1.1	Wang, Tengyue	TuAT3.1
	TuCT1.3		TuAT3.2
Voyles, Richard	TuAT2.6	Wang, Tiexin	SuCC1.2
Vuletic, Jelena	MoAM6.2		TuAT3.3
Wan, Li	MoCC3.3	Wang, Ting	TuCT4.3
Wan, Qian	SuCC2.2		TuCT4.3
	MoCC3.4	Wang, Weixing	MoCC3.3
Wan, Yilei	SaAC2.5	Wang, Weiyao	MoAM4.3
Wang, Botao	TuAT4.4		MoBM7.4
Wang, Changhao	SuBM5.5	Wang, Wenqing	SuCC2.4
Wang, Changliang	SuCC1.5	Wang, Xi Vincent	SaBC1
	TuAT7.6	Wang, Xiaocheng	TuAT7.6
Wang, Chaoran	TuBT5.2	Wang, Xingang	SaAC2.3
Wang, Chen	SaAC2.5	Wang, Xinming	SaBC3.2
Wang, Deming	SaAC2.4	Wang, Xueqian	SuCC1.5
Wang, Di	SaAC1.2	Wang, Xueqian	TuAT7.6
Wang, Di	SuAM3.1	Wang, Xuetao	SaAC3.5
W 5: 1	MoBM2.5	Wang, Yanying	TuAT6.5
Wang, Dianlong	MoAM4.5	Wang, Yanzhi	MoDC1.2
Wang, Dongyuan	SaBC1.4	Wang, Yifan	SaAC3.5
Wang, Fangshi	SuCC1.4	Wang, Ying	SaAC1.2
Wang, Feifan	SuBM7.2	Wang, Yong	TuAT4.3
Manage Oammahan	TuAT5.4	Wang, Yuanxiang	SuAM1.2
Wang, Gengchen	TuBT2.2	Wang, Yun	SuCC2.4
Wang, Gongshu	SaBC2	Wang, Zekai	MoAw1H.2
	SaBC2	Mana Zhaoiia	TuBT6.1
	SaBC2.2 SaBC2.3	Wang, Zhaojie Wang, Zi	MoCC1.5 MoBM5.2
	SaBC2.3 SaBC2.4	Watanabe, Kosuke	MoBM1.2
Wang, Haiyan	MoBM3	Wei, Jinxiang	MoDC1.4
vvarig, i laiyari	MoBM3.3	Wei, Junhu	SaAC2
Wang, Hongwei	TuAT3	Wei, Julilla	SaAC2.4
wang, nongwo	TuAT3		MoDC2.5
	TuAT3	Wei, Mengjun	SaBC1.5
Wang, Jiacun	SaWAM3.1	Wei, Qi	SuCC1.4
Wang, biaban	TuCT7	Wei, Rui	SuCC1.4
	TuCT7	Weinland, Jakob	TuCT1.6
	TuCT7.4	Wen, Jian	TuCT4.2
	TuCT7.4	,	TuCT4.2
Wang, Jingwei	MoBM7.5	Wen, John	TuCT6
Wang, Jiongxin	TuAT3.4		TuCT6
Wang, Jipeng	MoCC2.2		TuCT6.4
Wang, Jun-Qiang	MoAM2.5		TuCT6.4
	MoDC2	Wen, Yao min	MoAM2.6
	TuAT5	Wen, Zhihui	SaBC1.5
Wang, Junfeng	MoDC2	Wieringa, Timotheus	TuCT1.3
	MoDC2	Wijayawardena, Bhagya	TuCT7.2
	MoDC2.1		TuCT7.2
	TuAT5	Wilbrandt, Robert	TuCT1.6
Wang, Junkai	SuCC2	Wilch, Jan	SuAM2.6
	SuCC2.6		MoAM7.5
Wang, Junliang	SaAC1	Winter, Tim Robin	SuBCAP.2
	SaAC1.5	Witherell, Paul	SuAM1.5
	SaAC1.6	Wong, Alexander	SuBCAP.2
	TuAT4	Wu, Chu-ge	SuCC3.6
Wang, Kai	SaBC3.3	Wu, Daniel	TuCT3.2
Wang, Lihui	SaBC1	W 5 :	TuCT3.2
Wang, Liwei	MoAM4.5	Wu, Dazhong	TuAT4

Wu, Haoran	MoCC1.1		TuAT5
Wu, Jiang	MoAM2.1	Yan, Hao	TuAT4.4
	MoAM2.2	Yan, Hu	SaAC3.5
Wu, Jianguo	SaBC3.2	Yan, Ruixuan	SuAM5.2
Wu, Juan	SuAM7.2	Yan, Wei	MoBM2.5
,	MoAw2S.4	Yan, Yi	SuCC2.3
Wu, Lihui	SaAC1.5	Yang, Chenguang	SuBM5
Wu, Naigi	MoCC2	3, - 3 3	SuBM5.6
	MoCC2.3	Yang, Chenyang	MoAM2.4
	TuAT5.6	Yang, Chunsheng	TuAT2
Wu, Qingin	MoAM2.4	rang, enanchong	TuAT2
Wu, Shizhen	TuAT1.6		TuAT2.1
Wu, Shuangfei	SuCC1.5		TuAT2.2
Wu, Wei	SaAC2.6	Yang, Haw-Ching	SuAM1.4
Wu, Xiuli	TuBT3.4	rang, riaw-Ching	SuAM1.4 SuAM2.4
Wu, Zerui	MoDC1.3	Vana Ilui	TuBT7.4
Wu, Ziteng	SaAC3.2	Yang, Hui	SuAM1.5
Xia, Guisuo	SaBC1.5	Yang, Liangjing	SuCC1
N// 1	TuAT2.3		SuCC1.2
Xia, Jun	MoCC1.4		TuAT3
Xia, Li	MoCC1		TuAT3
	MoCC1.1		TuAT3.1
Xia, Ruiyan	TuAT2.3		TuAT3.2
Xiang, Dong	TuBT3.4		TuAT3.3
Xiao, Guoxian	TuBT7.1	Yang, Miao	SaAC2.6
Xiao, Hui	SuBM7.6	Yang, Pengfei	SaAC3.2
•	MoDC1.5	Yang, Qibiao	MoCC2.2
Xiao, Jing	MoBM5.6	Yang, Tong	TuCT6.2
Xiao, Li	MoCC1.3	3, 3	TuCT6.2
Xiao, Songjie	TuAT3.1	Yang, Yang	SaBC2
Xiao, Yang	TuAT1.5	rang, rang	SaBC2
Xie, Shuangyu	SuAM5.6		SaBC2.2
Xie, Xiaolan	SuBM7.3		SaBC2.4
Xie, Xiaolei	MoDC1	Yang, Yujie	MoAM2.1
Ale, Alaolei	MoDC1	Yang, Zhuo	SuAM1.4
Via Viaina	MoDC1.3	Yano, Taiki	SuBM2.5
Xie, Yiqing	TuAT3.6	V D'	MoBM2.6
Xie, Yonghua	TuAT2.4	Yao, Bin	TuCT4.4
Xiong, Gang	MoCC3.3		TuCT4.4
Xiong, Wenqing	TuAT5.6	Yao, Bing	MoAw1H.2
Xiong, Zhenhua	TuAT7		TuBT6
	TuAT7.5		TuBT6.1
Xu, Chuqiao	SaAC1.6	Yao, Bitao	SaBC1.2
Xu, Hejie	TuAT7.6		SaBC1.3
Xu, Hongwei	SaBC3.5	Yao, Chen	MoCC3.1
Xu, Jia	TuAT4.1	Yao, Chen	TuCT4.3
Xu, Jun	SaAC1		TuCT4.3
	SaAC1.3	Yao, Ying-Chu	TuAT6.2
Xu, Ruiyu	SaBC3.2	Yao, Yiyong	TuAT4.5
Xu, Wenjun	SaBC1	Yasuda, Ken'ichi	MoBM5.5
•	SaBC1.2	Ye, Hongling	MoCC3.5
	SaBC1.3	Ye, Lingi	SuCC1.5
	SuBCAP.3	· •	TuBT1.4
Xu, Xinyi	SaAC2.3	Yeh, Shu-Hao	MoBM2.5
Xu, Xun	SuAM2.1	Yi, Jingang	SaWAM1.1
Xu, Yintao	SuCC1.3	··, -···ʊ-··ʊ	MoP1L
Xu, Zhanbo	MoAM2.1		MoAM6.6
Au, Limito	MoAM2.2		MoAM7
Xue, Huan	MoCC2.2		TuAT7.5
Xue, Li	MoCC1.2		TuCT4
Xue, Xiaoguang	SaBC2.1		TuCT4
Yamaguchi, Tomoyuki	MoAM7.1		TuCT4.5
Yamanobe, Natsuki	SuBM3.6		TuCT4.5
Yamazaki, Kimitoshi	TuCT6.5		TuCT6.1
	TuCT6.5	N// NA/	TuCT6.1
Yan, Bing	MoAM5.3	Yi, Wenchao	MoCC1.6
	TuBT5	Yigit, Tarik	MoAM6.6
Yan, Chao-Bo	SaAC2.4	Yin, Li	MoCC2.1
	SaBC2.1	Yin, Pei	SaBC2.6
	SaBC2.5	Yin, Siyuan	SuCC3.2
	MoDC2	Yin, Yecan	SuCC3.5
	MoDC2.2	Yin, Yilin	SuBM7.5
	MoDC2.3	Yokota, Yoshiki	SuBM2.1
	MoDC2.5	Yoshinaga, Yuki	TuBT5.6
		-	

Yu, Kaiyan	SuAM7	Zhang, Zhengtao	SuCC2.5
, ,	SuAM7.2	Zhang, Ziliang	MoCC2.4
	MoAw2S.4	Zhang, Ziyang	MoBM6.1
	MoBM2	Zhao, Huan	SuCC3.5
Yu, Rui	SuAM4.6	Zhao, Fidan Zhao, Lei	SaAC2
•		Zilao, Lei	
Yu, Tian	TuAT5.5	70 1 5-5	SaAC2.5
Yu, Wen	SuAM4	Zhao, Liping	TuAT4.5
	SuAM5	Zhao, Meihua	MoCC3.3
	TuBT1	Zhao, Qianchuan	SaAC3
	TuBT2.5		SaAC3.5
Yuan, Haitao	MoAM2.3		SuP2L
Yuan, Jing	TuCT4.2	Zhao, Shiwen	MoDC2.1
, 0	TuCT4.2	Zhao, Sipei	TuCT5.3
Yuan, Mengxue	MoCC1.2	,	TuCT5.3
Yudin, Evgeny	SuAM3.5	Zhao, Ye	TuBT5
Yue, Fengyu	TuAT4.3	21100, 10	TuBT5.6
Yue, Tiangi	SuBM5.6	Zhao, Yue	MoDC1.2
			SaBC2.4
Yue, Xiaowei	TuBT7	Zhao, Yuming	
	TuBT7.3	Zheng, Hanyi	MoDC1.6
Yuen, Chau	MoAM4.2	Zheng, Pai	SaAC2.2
	MoBM3.1		SaBC1
Yumbla, Francisco	TuCT1.5		SaBC1
Zaenker, Tobias	SuAM6.1		SaBC1.1
Zan, Xin	SuCC1.4		MoCC3.5
Zareinia, Kourosh	TuBT1.6	Zheng, Yu	SaAC2.2
Zec, Simon	SuBM7.1	3,	SaAC3.4
Zefran, Milos	SuAM7		TuAT4
Zonan, milos	SuAM7.3	Zheng, Yu	TuCT4.3
Zeliang, Zhang	MoCC1.3	Zilolig, Tu	TuCT4.3
	SuBCAP.2	Thong Tigion	
Zeng, E Zhixuan		Zheng, Ziqian	MoBM6.4
Zhang, Ao	SaAC1.4	Zhi, Yinqing	TuAT4.5
Zhang, Chen	SaAC2.1	Zhong, Jie	TuBT5.5
Zhang, Cheng	TuBT2.3	Zhong, Ninghan	TuAT3.6
Zhang, Chi	SuCC3.2	Zhong, Xiang	SuBM7
Zhang, Dapeng	SuCC1.1		SuBM7.1
Zhang, Hao	TuAT6.6		MoBM6.5
Zhang, Hejia	TuBT5.5		MoDC1
Zhang, Heng	TuAT7.5	Zhou, Benchun	MoBM2.1
Zhang, Hengyuan	SuBM2.6		MoBM2.3
Zhang, Jie	SaAC1.5	Zhou, Bin	SaAC3.4
	SaAC1.6	Zhou, Cangqi	SuCC3.6
Zhang, Junqi	SuWCC3.1	Zhou, Cheng	TuCT4.3
Zhang, Kun	MoAM4.5	Zilou, Ollolig	TuCT4.3
Zhang, Lei	MoDC2.4	Zhou, Chenhao	MoCC1.2
			SaAC2.1
Zhang, Liang	MoDC2	Zhou, Lelai	
	TuAT5	Zhou, Lijie	TuAT1.3
	TuAT5	Zhou, MengChu	SaBC2.6
	TuAT5.2		MoAM2
	TuAT5.3		MoAM2.3
Zhang, Peng	SuCC2.6	Zhou, Qian	MoCC1.5
Zhang, Peng	TuAT1.6	Zhou, Shunqian	MoDC2.5
Zhang, Qian	SuCC1.4	Zhou, Siqiong	MoAw1H.3
Zhang, Rong	SaAC2.2	Zhou, Yadong	MoAM2.1
Zhang, Sheng	MoDC2.3	•	MoAM2.4
Zhang, Si	SuBM7.6	Zhou, Yaqin	SaAC1.6
Zhang, Siqi	SuAM1.5	Zhou, Yifan	SaBC3.4
Zhang, Siwei	TuAT5.6	Zhou, Ziyi	TuBT5.6
Zhang, Tianging	TuAT3.2	Zhu, Chunchu	TuCT6.1
Zhang, Yianqing Zhang, Xi	SaBC3	Zila, Ollalicila	TuCT6.1
Zilang, Ai		7h., Ll.,	
	SaBC3	Zhu, Hu	MoCC3.1
7 1	MoAw1H.1	Zhu, Jiyue	SaAC3.1
Zhang, Xiang	SuBM5.5	Zhu, Tianyu	TuAT5.3
Zhang, Xiangying	MoCC3.5	Zhu, Wenjun	TuAT2.4
Zhang, Xuebo	TuCT4.2	Zhu, Wenyao	SuAM5.5
	TuCT4.2	Zhu, Yuanzhe	TuAT6.5
Zhang, Yao	SuBM7.6	Zhu, Zheng	SuCC3.2
Zhang, Yongchang	MoAM4.6	. •	MoCC3.1
Zhang, You	SaAC2.6	Zioud, Tariq	MoBM4.3
Zhang, Yuming	SaWBM2.1	Zolotas, Mark	TuAT7.3
	SuAM4	Zong, Jianping	TuAT1.4
	SuAM4 SuAM4.6		
Zhang Zo		Zou, Jun	SuAM3.1
Zhang, Ze	SuBM4.4	Zou, Minjie	SuAM2.3
76 76 1	MoAM3.5	Zou, Wei	SaAC2.3
Zhang, Zhanluo	SaBC3.5		











Automation for a Resilient Society



Call for Papers

case2023.org



IEEE International Conference on Automation Science and Engineering (CASE) is the flagship automation conference of the IEEE Robotics and Automation Society (RAS) and constitutes the primary forum for cross-industry and multidisciplinary research in automation. Its goal is to provide broad coverage and dissemination of foundational research in automation among researchers and practitioners. IEEE CASE 2023 will be held in Auckland, New Zealand, on August 27-31, 2023, and the theme is Automation for a Resilient Society.

Auckland is one of the world's most sustainable and liveable cities with dynamic multi-culture and inclusive communities as well as an innovative hub in the Asia Pacific region. CASE 2023 will be a unique opportunity for attendees around the world to enjoy the stunning views of the New Zealand landscape, experience the passion and diversity of this vibrant city, and learn about the automation-enabled innovation and transformation of agriculture, aquaculture, forestry, manufacturing, infrastructure, and healthcare sectors in Aotearoa New Zealand.

Submission of Special Session / Workshop Proposals and Regular Papers

IEEE CASE 2023 invites special session and workshop proposals, regular papers, industry papers and presentationonly papers related to the conference topics, which include but are not limited to:

- Human-centred automation
- Automation in life science
- Sustainability and green automation
- Automation in agriculture and horticulture
- Automation sciences for pandemics
- Healthcare automation
- **Key Dates**

15 February 2023: Special session proposal submission due 1 March 2023: Regular & special session full paper submission due 1 April 2023: Workshop proposal, industry paper & presentation only paper submission due

Supported by

- Smart building and construction
- Knowledge-based automation
- Manufacturing automation
- Cloud-based automation
- Big data, data mining and machine learning
- Privacy and security in automation

15 May 2023: Paper acceptance notification

15 June 2023: Final paper submission due

15 June 2023: Author registration due

28 August-1 September 2023: Conference

Contacts

General Chair Professor Xun Xu The University of Auckland C: +64 9 923 4527

⋈: x.xu@auckland.ac.nz

Programme Chair Prof. Dr.-Ing. Birgit Vogel-Heuser Technical University of Munich

C: +49 89 289 16400

Organisation Chair Dr. Yuqian Lu

The University of Auckland

©: +64 9 923 1584

Hosted by





