



The 7th International Conference on Industrial Artificial Intelligence (IAI 2025)

21-24 August, 2025, Shenyang, China



Conference Program



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Panel Sessions 4

8月22日 14:00-15:45

友谊宫 辽宁厅 A

August 22 14:00-15:45

Friendship Palace, Liaoning Hall A

How Does Artificial Intelligence Promote the Development of the Automation Discipline?

人工智能如何促进自动化学科发展?

Chair: Ben M. Chen (Chinese University of Hong Kong, China)

Panelists: Guoxiang Gu (Louisiana State University, USA)

Biao Huang (University of Alberta, Canada)

Wen Yu (CINVESTAV-IPN, Mexico)

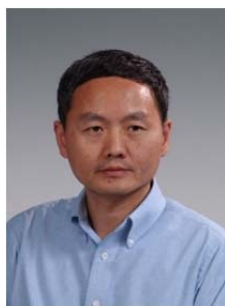
Dianhui Wang (Qingdao University of Science and Technology, China)

Host: Hairong Dong (Shandong University of Science and Technology, China)



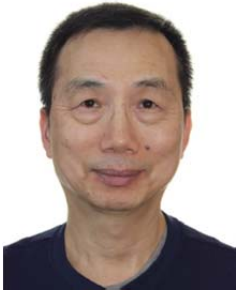
Ben M. Chen is a Professor and Chairman of the Department of Mechanical and Automation Engineering at the Chinese University of Hong Kong (CUHK). Prior to joining CUHK in 2018, he was a Provost's Chair Professor in the Department of Electrical and Computer Engineering at the National University of Singapore, where he worked for 25 years. He also served as an Assistant Professor at the State University of New York at Stony Brook, USA, from 1992 to 1993 and worked as a Software Engineer at South China Computer Corporation from 1983 to 1986. His current research focuses on unmanned systems and their applications.

Professor Chen is an IEEE Fellow, CAA Fellow, HKIE Fellow and a Fellow of the Academy of Engineering, Singapore. He has authored or co-authored hundreds of research articles and ten research monographs in control engineering, unmanned systems, and financial market modeling. He has served on the editorial boards of several international journals, including *Automatica* and *IEEE Transactions on Automatic Control*. Currently, he is an Editor-in-Chief of *Unmanned Systems* and an Editor of the *International Journal of Robust and Nonlinear Control*.



Guoxiang Gu received the Ph.D. degree in Electrical Engineering from University of Minnesota, Minneapolis, MN, USA, in 1988. From 1988 to 1990, he was with the Department of Electrical Engineering, Wright State University, Dayton, OH, USA, as a Visiting Assistant Professor. He has held visiting positions with Wright-Patterson Air Force Base, OH, USA, and with the Hong Kong University of Science and Technology, Hong Kong. Since 1990, he joined Louisiana State University (LSU), Baton Rouge, LA, USA, where he is currently a Professor of Electrical and Computer Engineering. He has authored two books, over 80 archive journal papers, and numerous book chapters and conference papers. His research interests include networked feedback control, system identification,

and statistical signal processing. Dr. Gu served as an Associate Editor for *IEEE Transactions on Automatic Control* from January 1998 to December 2001 and from January 2018 to December 2021, *SIAM Journal on Control and Optimization* from 2006 to 2009, and *Automatica* from 2006 to 2012. He is currently the F. Hugh Coughlin/CLECO Distinguished Professor of Electrical Engineering at LSU.



Biao Huang Professor and Distinguished Professor at the University of Alberta, Canada. Fellow of the Canadian Academy of Engineering, IEEE Fellow, Humboldt Scholar (Germany), Fellow of the Asia-Pacific Artificial Intelligence Association, Fellow of the Canadian Society for Chemical Engineering, and Fellow of the Chinese Association of Automation. He earned his Bachelor's and Master's degrees from Beihang University and received his Ph.D. from the University of Alberta in 1997. His interdisciplinary research spans automation, machine learning, digital twins, and more. He has published over 590 papers and authored five monographs.



Wen Yu received the B.S. degree in automation from Tsinghua University, Beijing, China in 1990 and the M.S. and Ph.D. degrees, both in automatic control, from Northeastern University, Shenyang, China, in 1992 and 1995, respectively. From 1995 to 1996, he served as a lecturer in the Department of Automatic Control at Northeastern University, Shenyang, China. Since 1996, he has been with CINVESTAV-IPN (National Polytechnic Institute), Mexico City, Mexico, where he is currently a professor with the Departamento de Control Automático.

From 2002 to 2003, he held research positions with the Instituto Mexicano del Petróleo. He was a Senior Visiting Research Fellow with Queen's University Belfast, Belfast, U.K., from 2006 to 2007, and a Visiting Professor with the University of California, Santa Cruz, from 2009 to 2010. He also holds a visiting professorship at Northeastern University in China from 2006.



Dianhui Wang Dr. Wang was awarded his PhD degree (March 1995) in Industrial Automation from Northeastern University, China. From Sept. 1995 to June 2001, he worked as a Postdoctoral Fellow at Nanyang Technological University, Singapore and The Hong Kong Polytechnic University, Hong Kong, China. He joined La Trobe University in July 2001 and worked as a Reader and Associate Professor in the Department of Computer Science and Information Technology until the end of 2020, and with an adjunct appointment from January 2021. Since 2017, Dr Wang has been a visiting Professor at State Key Laboratory of Synthetical Automation of Process Industries, Northeastern University, China. In July 2021, He joined the Institute of Artificial Intelligence at China University of Mining and Technology. He is the Funding Director of Research Centre for Stochastic Configuration Machines. His current research focuses on Stochastic Configuration Machines (SCM) for big industrial data modelling and analytics, lightweight computing, and interpretable AI technology. Dr. Wang published more than 270 technical papers on applied mathematics, control engineering and computer sciences. He is a Senior Member of IEEE, serving as an executive Editor-in-Chief for Industrial Artificial Intelligence, Associate Editor for TCYB, TFS, INS, AIR, and WIREs Data Mining and Knowledge Discovery.



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FOR PROCESS INDUSTRIES

Dear Prof. Wen Yu,

On behalf of the Organizing Committee, it is our great pleasure to invite you to be a panelist of the plenary panel discussion on “How Does Artificial Intelligence Promote the Development of the Automation Discipline?” at the 7th International Forum on Frontiers of Automation and Intelligence (FAI 2025, <http://iai.neu.edu.cn/>) in Shenyang, China, as a part of the 7th International Conference on Industrial Artificial Intelligence (IAI 2025), which will be held on August 21-24, 2025.

FAI 2025 is an international event hosted by the State Key Laboratory of Synthetical Automation for Process Industries (SAPI) of Northeastern University in cooperation with the IEEE Industrial Electronics Society, the Technical Committee on Big Data of the Chinese Association of Automation, the Technical Committee on Industrial Artificial Intelligence of the Chinese Association of Artificial Intelligence, and the Editorial Board of Control Engineering of China and Journal of Northeastern University. The plenary lectures will bring together experts and researchers in the field of automation and intelligence from all over the world to facilitate discussions of recent developments in the artificial intelligence driven modeling, control, and optimization of industrial processes, especially on the frontiers of control sciences, the optimization and intelligent modeling of complex systems, and AI driven automation.

Thank you in advance for your participation and we are looking forward to your wonderful speech. If you have any questions or concerns, please contact Dr. Jialu Fan (jlfan@mail.neu.edu.cn, 18204058952).

P. S. Please kindly let us know whether you accept the invitation, and send us your photo and brief bio by [August 8, 2025](#).

Sincerely yours,

Prof. Karl H. Johansson

Prof. Okayay Kaynak

Prof. Tianyou Chai

Prof. Tianyou Chai

General Chairs of IAI 2025

General Chairs of FAI 2025