

by Imre J. Rudas

Five SMCS Members Elevated to IEEE Fellow

It gives me great pleasure to announce that five elite members of our Society have been elevated to the grade of Fellow in 2020. It is customary to celebrate this through a formal ceremony at the IEEE International Conference on Systems, Man, and Cybernetics, our flagship annual conference in October. The IEEE grade of Fellow is conferred by the IEEE Board of Directors upon a person with an outstanding record of accomplishments in any of the IEEE fields of interest. The total number selected in any one year cannot exceed one-tenth of 1% of the total voting membership.

IEEE Fellow is the highest grade of membership and recognized by the technical community as a prestigious honor and an important career achievement. As the world's leading professional association for advancing technology for humanity, with more than 400,000 members in 160 countries, IEEE is a leading authority on a wide variety of areas ranging from aerospace systems, computers and telecommunications to biomedical engineering, electric power, and consumer electronics.

I am proud to present a short biography of the newly elevated IEEE Fellows along with their contributions.

Jianbo Lu

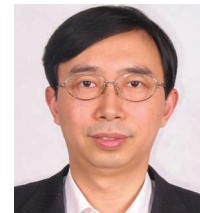


Jianbo Lu earned his Ph.D. degree in aerospace engineering from Purdue University in 1997. Since 2000, he has been with Ford Motor Company, where he is currently the technical expert and group leader in robotics for mobility solutions at the Research and Innovation Center. He has published more than 80 papers on systems and controls and their applications in automotive systems, including chassis controls, driver assistance, active safety, and robotics and autonomous vehicles. He holds 143 U.S. patents. Lu was twice awarded with the highest Ford corporate award—the Henry Ford Technology Award (2002 and 2013)—for developing and implementing automotive technologies with significant business impact. Applications of his work can be found in a number of current implementations in tens of millions of vehicles.

Lu is on the editorial board of *International Journal of Vehicle Autonomous Systems*, *International Journal of Vehicle Performance*, and *ASME Journal of Autonomous Vehicles and Systems*. He was an associate editor for *IEEE Transactions on Control Systems Technology* (2010–2016) and *IFAC Journal of Control Practice Engineering* (2008–2014). He served as the vice chair for industry

and application at the 2015 American Control Conference. He is the founding chair and cochair of the Intelligent Vehicular Systems and Control Technical Committee.

Bin Jiang



Bin Jiang earned his Ph.D. degree in automatic control from Northeastern University, Shenyang, China, in 1995. From 1998 to 2013, he was a postdoctoral fellow, a research fellow, an invited professor, and a visiting professor in Singapore, France, the United States, and Canada, respectively. Since 2004, he has been with Nanjing University of Aeronautics and Astronautics (NUAA), China. He is currently a chair professor of the Cheung Kong Scholar Program in the Ministry of Education and the vice president of NUAA.

Jiang's research interests include fault diagnosis and fault-tolerant control. He has deeply and systematically investigated intelligent fault diagnosis and fault-tolerant control methods and technologies for various complex dynamic systems with applications to flying and ground vehicles, including satellites, near-space vehicles, helicopters, and high-speed rail trains. He has authored eight books and more than 200 referred international journal and conference papers.

He is the chair of the IEEE Control Systems Chapter in the IEEE Nanjing Section and a member of the IFAC Technical Committee on Fault Detection, Supervision, and Safety of Technical Processes. He was a recipient of the Second Class Prize of China's National Natural Science Award in 2018. He has served as an associate editor or as an editorial board member for a number of journals, including

IEEE Transactions on Cybernetics, *IEEE Transactions on Control Systems Technology*, *Neurocomputing*, *Journal of the Franklin Institute*, and *International Journal of Control, Automation, and Systems*.

Yo-Ping Huang



Yo-Ping Huang earned his Ph.D. degree in electrical engineering from Texas Tech University, Lubbock. He is currently a professor in the Department of Electrical Engineering and the director of the AIoT R&D Center, National Taipei University of Technology, Taiwan, where he served as the secretary general. He was a professor and the dean of research and development, the dean of the College of Electrical Engineering and Computer Science, and the department chair with Tatung University, Taipei, Taiwan. His current research interests include fuzzy systems design and modeling, deep learning modeling, intelligent control, medical data mining, and rehabilitation systems design.

Huang serves on the IEEE Technical Activities Board Awards and Recognition Committee; the IEEE Conference Publications Committee; the IEEE Systems, Man, and Cybernetics Society (SMCS) Board of Governors; and as chair of the IEEE SMCS Technical Committee on Intelligent Transportation Systems and the Taiwan SIGSPATIAL Association for Computing Machinery Chapter. He is the associate editor of *IEEE Transactions on Systems, Man, and Cybernetics: Systems*; *International Journal of Fuzzy Systems*; and *IEEE Transactions on Artificial Intelligence*. He received the Most Active Technical Committee Award (2019) and the Outstanding Chapter Award both from the IEEE SMCS (2016) and the Outstanding Chapter Award from the IEEE SMCS Taipei Chapter (2016).

He was the president of the Taiwan Association of Systems Science and

Engineering, chair of IEEE SMCS Taipei Chapter, chair of the IEEE Computational Intelligence Society Taipei Chapter, and chief executive officer of the Joint Commission of Technological and Vocational College Admission Committee, Taiwan. He was elevated to IEEE Fellow in 2020 “for contributions to fuzzy and grey modeling in intelligent healthcare systems design.” He is also a fellow of the Institution of Engineering and Technology (IET) and of the International Association of Grey System and Uncertain Analysis.

Saeid Nahavandi



Saeid Nahavandi earned his Ph.D. degree from Durham University, United Kingdom, in 1991. He is an Alfred Deakin professor, pro-vice-chancellor (defense), chair of engineering, and founding director for the Institute for Intelligent Systems Research and Innovation at Deakin University. His research interests include the modeling of complex systems, robotics, and haptics. He has published more than 900 papers in various international journals and at conferences. His research output has resulted in two start-ups: Universal Motion Simulation Pty Ltd and FLAIM Systems Pty Ltd.

Nahavandi was the recipient of the Young Engineer of the Year Award for his novel intelligent robotic end effector (1996), the Mobility Engineering Excellence Gold Award—The Society of Automotive Engineers (Australasia, 2016), the IEEE SMC Outstanding Contribution Award (2011), the IEEE SMC Best Chapter Award (2018), the Barry Jones Medal for Promotion of Research and Innovation (2018), and the IEEE SMC Meritorious Award (2019). He is the senior

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editor of *IEEE Systems Journal*, the associate editor of *IEEE Transactions on Cybernetics*, and the editor-in-chief of *IEEE Systems, Man and Cybernetics Magazine*. He is a fellow of the Australian Academy of Technological Sciences and Engineering, of Engineers Australia, and of the Institution of Engineering and Technology (IET).

He was elevated to IEEE Fellow in 2020 “for contributions to haptically-enabled robotic systems.”

Laurence T. Yang



Laurence T. Yang earned his B.E. degree in computer science and technology and his B.Sc. degree in applied physics, both from Tsinghua University, China, and his Ph.D. degree in computer science from the University of Victoria, British Columbia, Canada. He is a professor and W.F. James Research Chair at St. Francis Xavier University, Nova Scotia, Canada. His research includes parallel, distributed, and cloud computing; embedded and ubiquitous/pervasive computing; and big data.

He was elevated to IEEE Fellow in 2020 “for his contributions to modeling and design for cyber-physical-social systems.” He is also a fellow of the Canadian Academy of Engineering, the Engineering Institute of Canada, and the IET.

About the Author

Imre J. Rudas (rudas@uni-obuda.hu) is the president of the IEEE Systems, Man, and Cybernetics Society. He is a Fellow of IEEE.

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