New Chief, New Journey, New Excellence

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After five years planning and working for its creation, and four years serving as its Founding Editor-in-Chief, it is time for me to step down and free IEEE/CAA Journal of Automatica Sinica to the new journey for its new level of excellence and significance. As many of you have known, on April 1, 2017, I have been selected as the Editor-in-Chief of IEEE Transactions on Computational Social Systems by IEEE Publication Rejuvenation Committee. For next few years, I would like to focus my time and effort to promote TCSS, a journal I had held high hope and helped in its design and launching many years ago. Therefore, I have to resign from the EiC of JAS.

This is an extremely difficult decision to make, but I feel it is better for JAS to have new energy and new direction for its future, especially when Professor MengChu Zhou is willing and able to help and guide this great publication.

I started to know Professor MengChu Zhou in the Fall of 1987 when he began his doctoral study at the Department of Mechanical Engineering at Rensselaer Polytechnic Institute. In the Spring of 1988, he came to my department called Department of Electrical, Computer and Systems Engineering. We worked under the supervision of different professors but shared a common research interest, i.e., intelligent control—a discipline emerged in those years. We are both interested in a new modeling method called Petri nets. He worked on the synthesis of Petri nets for discrete event control of automated manufacturing systems and I worked on using Petri nets to develop and enrich intelligent machine and control theory. During the period of 1987-1990 at RPI, we exchanged our research ideas, played soccer together, and, most unforgettably, we drove for over 6 hours to Washington D.C. to attend the second IEEE Symposium on Intelligent Control in August 1988 where he presented his first-ever paper “Adaptive design of Petri net controllers for automatic error recovery”.

Dr. Zhou showed his research talent by extending his conference paper, submitted it to and obtained its acceptance at the first round from IEEE Trans. on Systems, Man, and Cybernetics. The paper “Adaptive design of Petri net controllers for error recovery in automated manufacturing systems” was published in 1989. He then started his investigation about how to build up a Petri net model such that it had some nice properties given system specifications. Such a model can be used to generate a discrete event controller with desired features. From his over 300-page doctoral thesis, he produced seven conference papers, five IEEE Transaction papers and one IFAC Automatica paper. He was nick-named as “a paper generator” since none in his group had been so productive. Three years later, he also published his first book/monograph called Petri Net Synthesis for Discrete Event Control of Manufacturing Systems by Kluwer in 1993.

During his three-year Ph.D. study, he developed and enjoyed many sport activities. In particular, he had skied for three seasons at PRI to combat long winter time at the upper state of New York and self-learned to become an excellent tennis paler during summer time. They are now his top two favorite sport activities. He was also a frequent bridge player. These activities made him not only physically fit but also mentally happy, resulting in his high productivity in his research.

He learned much from his doctoral advisor, Dr. Frank DiCesare (IEEE Systems, Man and Cybernetics Society’s former vice-president) as well as such famous scholars as Dr. George Saridis (my former advisor, IEEE Robotics and Automation Society’s former president), Dr. Arthur Sanderson (his thesis committee member, IEEE Robotics and Automation Society’s former president), Dr. James Tien (Member of US National Academy of Engineering, IEEE Systems, Man and Cybernetics Society’s former president), and Dr. Robert F. McNaughton Jr. (his thesis committee member, a pioneer in the field of theoretical computer science).

What he has impressed me the most is that since his first Petri net paper exactly 30 years ago, he has been still writing Petri net papers, thereby establishing him as the very top expert in the field of Petri nets and their applications ranging from robotic systems in semiconductor manufacturing, flexible manufacturing systems, and intelligent transportation systems to scheduling of oil refinery plants, smart grid analysis and Internet-of-Things-based smart automated system design.

Professor Zhou has been a dedicated, enthusiastic and highly responsive volunteer and technical leader. His outstanding records of numerous professional services and abundant experience he gained over the past thirty years should enable him to serve as an exceptionally effective Editor-in-Chief of IEEE/CAA Journal of Automatica Sinica. Hence, I proudly introduce him to you.

Last but not least, I would like to thank all contributors, associate editors, guest editors, especially Managing Editor Dr. Yan Ou, Deputy Editor-in-Chief Prof. Derong Liu, Chair of TAB Periodical Partnership Opportunity Committee Prof. Steve Yurkovich, Manager of IEEE Technical Activities Society Programs and Audience Engagement Laura Creighton, Steering Committee Chair Prof. William R. Hamel, and Past IEEE SMC Presidents Profs. C. L. Philip Chen, Lijiljana Trjakovic, Dimitar Filev, and many others, for their great support and contributions to the creation and operations of IEEE/CAA Journal of Automatica Sinica during the past 9 years.
MengChu Zhou is an outstanding researcher, technical leader, journal editor, conference organizer, and educator. He received his B.S. degree in Control Engineering from Nanjing University of Science and Technology, Nanjing, China in 1983, M.S. degree in Automatic Control from Beijing Institute of Technology, Beijing, China in 1986, and Ph.D. degree in Computer and Systems Engineering from Rensselaer Polytechnic Institute, Troy, NY in 1990. He joined New Jersey Institute of Technology (NJIT), Newark, NJ in 1990, and is now a Distinguished Professor of Electrical and Computer Engineering, the Director of Discrete-Event Systems Laboratory and CRRC-ZIC Laboratory for Rail System Network and Information Technologies. He held or holds a few visiting professor positions including Tongji University, Macau University of Science and Technology and King Abdulaziz University. His research interests are in intelligent automation, Petri nets, Internet of Things, Web service, workflow, big data, transportation and energy systems. He has over 700 publications including 12 books, 400+ journal papers (about 300 in IEEE transactions), and 28 book-chapters. He has 11 patents and several pending ones.


Dr. Zhou has led or participated in over 50 research and education projects with total budget over $12M, funded by National Science Foundation, Department of Defense, National Institute of Standards and Technology, New Jersey Science and Technology Commission, and industry. He was the recipient of NSF’s Research Initiation Award, CIM University-LEAD Award from Society of Manufacturing Engineers, Perlis Research Award and Fenster Innovation in Engineering Education Award from NJIT, Humboldt Research Award for US Senior Scientists from Alexander von Humboldt Foundation, Leadership Award and Academic Achievement Award from Chinese Association for Science and Technology-USA, Asian American Achievement Award from Asian American Heritage Council of New Jersey, and Outstanding Contributions Award, Distinguished Lecturership, Franklin V. Taylor Memorial Award and the Norbert Wiener Award from IEEE Systems, Man, and Cybernetics Society, and Distinguished Service Award from IEEE Robotics and Automation Society.

He was founding chair of Chair of Semiconductor Manufacturing Automation Technical Committee of IEEE Robotics and Automation Society and Discrete Event Systems Technical Committee of IEEE Systems, Man, and Cybernetics Society. He is also founding Co-chair of Enterprise Information Systems Technical Committee (TC) and Environmental Sensing, Networking, and Decision-making TC of IEEE Systems, Man, and Cybernetics Society. He has been among most highly cited scholars for years by Web of Science/Thomson Reuters and now Clarivate Analytics and ranked top one in the field of engineering worldwide in 2012. He was invited to lecture in Australia, Canada, China, France, Germany, Hong Kong, Italy, Japan, Korea, Mexico, Saudi Arabia, Singapore, Taiwan, and US and served as a plenary/keynote speaker for many conferences. He is a life member of Chinese Association for Science and Technology-USA and served as its President in 1999. He is Fellow of The Institute of Electrical and Electronics Engineers (IEEE), International Federation of Automatic Control (IFAC), American Association for the Advancement of Science (AAAS) and Chinese Association of Automation (CAA).

Dr. Zhou loves playing tennis, downhill ski, and travel. His prior hobby includes playing bridge. He still enjoys it when such opportunity arises.