

Curriculum Vitae of Dr. Fei-Yue Wang



Dr. Fei-Yue Wang received his Ph.D. degree in Computer and Systems Engineering from RPI, Troy, New York, in 1990. He joined the Department of Systems and Industrial Engineering at the University of Arizona in 1990 and became a Professor (1999) and Director of the Robotics and Automation Lab (1990-2011) and Program in Advanced Research for Complex Systems (1999-2011). In 1999, he founded the Intelligent Control and Systems Engineering Center at the Institute of Automation, Chinese Academy of Sciences (CAS), Beijing, China, under the support of the Outstanding Oversea Chinese Talents Program from the State Planning Council and “100 Talent Program” from CAS. In 2002, he was appointed as the Director of the Key Laboratory of Complex Systems and Intelligence Science, CAS, and later Vice President of Institute of Automation, CAS. In 2011, he became the State Specially Appointed Expert and the Director of the State Key Laboratory for Management and Control of Complex Systems. In 2008, he became the Vice President and Secretary General of Chinese Association of Automation. Dr. Wang has authored over 600 papers, 20 patents, and dozens of books. He received more than 20 international awards and honors, and dozens of prizes of national and provincial levels for his excellent work in intelligent control, parallel intelligence, social computing, parallel management and control for complex systems. Dr. Wang was elected as Fellow of IEEE, IFAC, INCOSE, ASME, and AAAS. In 2007, he received the National Prize in Natural Sciences of China and was awarded the Outstanding Scientist by ACM. In 2014, he received the Norbert Wiener Award from IEEE SMC.

Contributions to the SMC Society and the IEEE:

IEEE: President, IEEE ITS Society (2005-2007); Member, IEEE Fellow Committee (2012-2014); Chair, IEEE ITS Society Fellow Evaluation Committee (2005-2014); EiC, IEEE Intelligent Systems (2009-2012); EiC, IEEE Transactions on Intelligent Transportation Systems (2009-2015); EiC, IEEE/CAA Journal of Automatica Sinica (2014-present); General/Program Chair, ITSC 2003/2008/2014, IV 2004/2005/2009; IEEE ITS Outstanding Research Award (2011), IEEE TNNLS Outstanding Paper Award (2017).

SMC Society: SMC Representative to IEEE ITS Council (2000-2005); Program Chair, IEEE 2001 International Conference on Systems, Man, and Cybernetics, Tucson, AZ, USA (2001); AE, IEEE Transactions on Systems, Man, and Cybernetics: Part A, Part B, Part C (2001- 2005); Franklin Taylor Best Paper Award, IEEE SMC Society (2002); Outstanding Contribution Award, IEEE SMC Society (2002); Member, BoG, IEEE SMC Society (2002-2005); AE, IEEE Transactions on Systems, Man, and



Cybernetics: Part A (2005-present); Norbert Wiener Award, IEEE SMC Society (2014); Norbert Wiener Lecture, IEEE International Conference on Systems, Man, and Cybernetics, Hong Kong (2015).

IEEE Journal Publications Related to Computational Social Systems:

1. Qingpeng Zhang, Daniel Dajun Zeng, **Fei-Yue Wang**, Ronald L. Breiger, James A. Hendler, “Brokers or Bridges? Exploring Structural Holes in a Crowdsourcing System”. *IEEE Computer*, 2016; 49(6): 56-64
2. Xiao Wang, Lingxi Li, Yong Yuan, Peijun Ye, **Fei-Yue Wang**, “ACP-based Social Computing and Parallel Intelligence: Societies 5.0 and Beyond”, *CAAI Transactions on Intelligence Technology* (2016), doi:10.1016/j.trit.2016.11.005.
3. Yisheng Lv, Yanjie Duan, Wenwen Kang, Zhengxi Li, ***Fei-Yue Wang**, “Traffic Flow Prediction With Big Data: A Deep Learning Approach”, *IEEE Transactions on Intelligent Transportation Systems*, 2015; 16(2):865-873
4. Wei Duan, Zhidong Cao, Youzhong Wang, Bin Zhu, Daniel Zeng, **Fei-Yue Wang**, Xiaogang Qiu, Hongbing Song, Yong Wang, “An ACP Approach to Public Health Emergency Management: Using a Campus Outbreak of H1N1 Influenza As a Case Study”, *IEEE Transactions on Systems Man Cybernetics-Systems*, 2013; 43(5):1028-1041
5. Yanwu Yang, Jie Zhang, Rui Qin, Juanjuan Li, **Fei-Yue Wang**, Wei Qi, “A Budget Optimization Framework for Search Advertisements Across Markets”, *IEEE Transactions on Systems, Man, and Cybernetics - Part A: Systems and Humans*, 2012; 42(5):1141-1151
6. **Fei-Yue Wang**, Ning Jin, Derong Liu, Qinglai Wei, “Adaptive Dynamic Programming for Finite-Horizon Optimal Control of Discrete-Time Nonlinear Systems with ϵ -Error Bound”, *IEEE Transactions on Neural Networks*, 2011; 24-36
7. **Fei-Yue Wang**, “The Emergence of Intelligent Enterprises: From CPS to CPSS”, *IEEE Computer*, 2010; 4:85-88
8. **Fei-Yue Wang**, Daniel Zeng, James A. Hendler, Qingpeng Zhang, Zhuo Feng, Yanqing Gao, Hui Wang, Guanpi Lai, “A Study of the Human Flesh Search Engine: Crowd-Powered Expansion of Online Knowledge”, *IEEE Computer*, 2010; 45-53
9. **Fei-Yue Wang**, “Parallel Control and Management for Intelligent Transportation Systems: Concepts, Architectures, and Applications”, *IEEE Transactions on Intelligent Transportation Systems*, 2010; 11(3):630-638
10. **Fei-Yue Wang**, “Toward a Paradigm Shift in Social Computing: The ACP Approach,” *IEEE Intelligent Systems*, 2007; 22(5):65- 67.