

## Symposium Proposal for the IEEE SSCI 2019

**Title:** Computational Intelligence for brain computer interfaces (CIBCI)

### **Biography of the Organizers:**

**Dongrui Wu** received a B.E in Automatic Control from the University of Science and Technology of China in 2003, an M.Eng in Electrical and Computer Engineering from the National University of Singapore in 2005, and a PhD in Electrical Engineering from the University of Southern California (USC) in 2009. He is now a Professor in the School of Automation, Huazhong University of Science and Technology, Wuhan, Hubei, China.

Dongrui Wu's research interests include affective computing, brain-computer interface, computational intelligence, and machine learning. Dongrui Wu has over 100 publications, including a book “*Perceptual Computing*” (with J.M. Mendel, Wiley-IEEE, 2010). He received the IEEE International Conference on Fuzzy Systems Best Student Paper Award in 2005, the IEEE Computational Intelligence Society (CIS) Outstanding PhD Dissertation Award in 2012, the *IEEE Transactions on Fuzzy Systems* Outstanding Paper Award in 2014, the North American Fuzzy Information Processing Society (NAFIPS) Early Career Award in 2014, and the IEEE Systems, Man and Cybernetics Society Early Career Award in 2017. He was a finalist of the *IEEE Transactions on Affective Computing* Most Influential Paper Award in 2015, the IEEE Brain Initiative Best Paper Award in 2016, the International Conference on Neural Information Processing (ICONIP) Best Student Paper Award in 2017, and the HanXiang Young Scientist Award in 2018. He was a selected participant of the National Academy of Engineering German-American Frontiers of Engineering Symposium in 2015, and the 13th Annual National Academies Keck Futures Initiative (NAKFI) conference in 2015.

Dongrui Wu is an Associate Editor of the *IEEE Transactions on Fuzzy Systems* (2011-), the *IEEE Transactions on Human-Machine Systems* (2014-), and the *IEEE Computational Intelligence Magazine* (2017-). He was the lead Guest Editor of the *IEEE Computational Intelligence Magazine* Special Issue on Computational Intelligence and Affective Computing in 2013, the lead Guest Editor of the *IEEE Transactions on Fuzzy Systems* Special Issue on Brain Computer Interface in 2017, and a Guest Editor of the *IEEE Transactions on Emerging Topics in Computational Intelligence* Special Issue on New Advances in Deep-Transfer Learning in 2018. He is a Senior Member of IEEE, a Board member and distinguished

lecturer of the NAFIPS, and a member of IEEE Systems, Man and Cybernetics Society Brain-Machine Interface Systems Technical Committee, IEEE CIS Fuzzy Systems Technical Committee, Emergent Technologies Technical Committee, and Intelligent Systems Applications Technical Committee. He has been Chair/Vice Chair of the IEEE CIS Affective Computing Task Force since 2012.

**Hong Zeng** received a B.E in Telecommunication from Nanjing University of Science and Technology in 2003, an M.Eng in Signal and Information Processing from Southeast University in 2006, and a PhD in Computer Science from Hong Kong Baptist University in 2009. He was a Post-Doc in the Department of Computer Science from Hong Kong Baptist University from 2009 to 2010. He is now an Associate Professor in the Robot Sensor and Control Lab at the School of Instrument Science and Engineering, Southeast University, Nanjing, China.

His current research focuses on bioRobot/bioMechatronic interfaces, haptic interaction systems and cortically coupled human-machine collaboration/interaction, with applications to neuro-rehabilitation robot, assistive robot, neuro-prosthetics and haptic interaction in virtual reality. Hong Zeng has published over 30 papers in several highly recognized academic journals, such as IEEE TPAMI, IEEE TNNLS, IEEE TKDE, Robotica, Front. Neurorobotics, Front. Neurosci. and so on. He was a selected participant of the National Academy of Engineering China-American Frontiers of Engineering Symposium in 2017.

**Hong Zeng** is a committee member of the Youth Committee of China Instrument Society, the Parallel Control and Management Technical Committee of China Automation Association, and the Hybrid Intelligence Technical Committee of China Automation Association.

**Zhigang Zeng** received the Ph.D. degree in Systems Analysis and Integration from the Huazhong University of Science and Technology, Wuhan, China, in 2003. He is currently a Professor with the School of Automation, Huazhong University of Science and Technology, Wuhan, China, and also with the Key Laboratory of Image Processing and Intelligent Control of the Education Ministry of China, Wuhan, China. He has been an Associate Editor of the *IEEE Transactions on Neural Networks* (2010-2011), the *IEEE Transactions on Cybernetics* (since 2014), and the *IEEE Transactions on Fuzzy Systems* (since 2016), and an Editorial Board member of *Neural Networks* (since 2012), *Cognitive Computation* (since 2010), and *Applied Soft Computing* (since 2013). He has published over 180 international journal papers. His current research interests include theory of functional differential equations and differential equations with discontinuous right-hand sides, and their applications to dynamics of neural networks, memristive systems,

and control systems.