

Call for Organized Session of ISCIIA 2020

(1) Title of the Organized Session

Advances in Signal Processing and Control of Biomedical Systems

(2) Principal Organizer Information

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(3) Session Description

Advances in biomedical sensing and actuation have enabled the development of signal processing and control technologies for biomedical systems, from medical image processing to remote healthcare monitoring, and to closed-loop drug delivery systems. In response to this trend, this section aims to present the state-of-the-art developments in biomedical signal processing and control. Interested issues covered in this section includes, but not limited to measurement, analysis, and control of signals and images in clinical medicine and the biological sciences. Emphasis is placed on contributions dealing with the practical, applications-led research on the use of methods and devices in clinical diagnosis, patient monitoring and management.

(4) Biography

Dawei Shi received the B.Eng. degree in electrical engineering and its automation from the Beijing Institute of Technology, Beijing, China, in 2008, and the Ph.D. degree in control systems from the University of Alberta, Edmonton, AB, Canada, in 2014. In December 2014, he was appointed as an Associate Professor at the School of Automation, Beijing Institute of Technology. From February 2017 to July 2018, he was with the Harvard John A. Paulson School of Engineering and Applied Sciences, Harvard University, Cambridge, MA, USA, as a Postdoctoral Fellow in Bioengineering. He is currently a professor at the School of Automation and the Institute of Engineering Medicine, both at the Beijing Institute of Technology. His research focuses on analysis and design of complex sampled-data control systems with applications to biomedical engineering, robotics, and motion systems. He serves as an associate editor for IET Control Theory and Applications and IET Cyber-Systems and Robotics. He also served as a guest editor for European Journal of Control. He served as an associate editor for IFAC World Congress and is a member of the IEEE Control Systems Society Conference Editorial Board. He is a senior member of IEEE.