

on Industrial Electronics and Applications



Organizers

- IEEE Industrial Electronics Chapter, Singapore
- IEEE Singapore Section

Financial and Technical Co-Sponsor

• IEEE Industrial Electronics Society

International Advisory Committee

Alexander Verl, Fraunhofer Institution, Germany Andrew Kusiak, The University of Iowa, USA Bimal K. Bose, Univ. of Tennessee, USA Bin Wu, Ryerson Univ., Canada Carlo Cecati, University of L'Aquila, Italy Chun Liang Lin, National Chung Hsing Univ. Taiwan Clarence de Silva, Univ. British Columbia, Canada David Hill, The University of Hong Kong & The University of Sydney, Australia Frank Lewis, Univ. of Texas at Arlington, USA G.A. Capolino, Univ. of Picardie Jules Verne, France Jinjun Liu, Xi'an Jiaotong University, China John Y. Hung, Auburn University, USA Kwanghoon Sohn, Yonsei Univ., Korea Miroslav Krstic, Univ. of California, San Diego, USA Nam Ling, Santa Clara Univ., USA Peter B. Luh, University of Connecticut, USA Xinghuo Yu, RMIT University, Australia Zhihong Man, Swinburne Univ. of Tec. Australia Zhong-Ping Jiang, Polytechnic Inst. of NYU,USA Zongxia Jiao, Beihang Univ., China

Organizing Committee

General Chair

General Co-Chair Cungang Hu Financial Chair Jingbing Zhang Secretary Zhengguo Li Keynote Speech Chair Changyun Wen Best Paper Award Chair Wenjian Cai **Publication Chair** Lijun Jiang **Publicity Chair** Fanglin Luo Invited Session Chairs Weihai Chen Fanglin Luo

Wenxiang Xie

Technical Program Committee

Chair Xing Zhu

Contact:

ICIEA 2017 Secretariat Email: secretariat@ieeeiciea.org URL: http://www.ieeeiciea.org

ICIEA 2017

THE 12th IEEE CONFERENCE ON INDUSTRIAL **ELECTRONICS AND APPLICATIONS**

18 - 20 June 2017, Siem Reap, Cambodia http://www.ieeeiciea.org

The 12th IEEE Conference on Industrial Electronics and Applications (ICIEA 2017) will be held during 18 - 20 June 2017, in Siem Reap, Cambodia. The Conference is organized by IEEE Industrial Electronics Chapter of Singapore and IEEE Singapore Section. IEEE Industrial Electronics Society is the financial and technical sponsor. The proceedings of past ICIEA have all been included in the IEEE Xplore database and indexed by EI Compendex and ISI Proceedings.

ICIEA 2017 marks the 12th Anniversary of the ICIEA conferences. As a premier conference, ICIEA provides an excellent forum for scientists, researchers, engineers and industrial practitioners throughout the world to present and discuss the latest technology advancement as well as future directions and trends in Industrial Electronics.

Authors are invited to submit full papers describing original research work in areas including, but not limited to:

Control and Systems: Adaptive and intelligent control, Hybrid control, Digital control theory and development, Robust control, Nonlinear systems and control, Process control, Networked control, Cooperative control, Bio-

Cyber-physical Systems: Smart grid, Intelligent transportation systems, Internet of things, Mobile healthcare, Distributed computing, Infrastructure simulations, Security and privacy, Data integration and visualization, New sensing platform and senses computing

Energy and Environment: Energy management and control systems, Energy distribution, storage and recovery, Alternative and green energy, Waste management, Waste treatment and recycling, Water network and security, Sensor technologies, Intelligent micro-grids

Industrial Informatics and Computational Intelligence: Human-machine interactions, Diagnosis and prognosis, Intelligent automation, Intelligent transportation system, Manufacturing execution systems, Networked embedded controllers, Machine-to-machine, Condition based maintenance, Multi-agent systems, Artificial neural network, Fuzzy systems, Genetic algorithm, Evolutionary computing, Machine learning, Data mining, Deep learning

Mechatronics: Robotics, Sensors and actuators, Sensor fusion, High precision motion control, Micro electromechanical systems, Industrial automation, Remote operation, Autonomous vehicle

Network and Communication Technologies: Network protocols, Mobile computing, Mobile ad hoc networks, Mobile agents, Network architectures, Quality of services, Cross-layer design/optimization, Design and performance evaluation, Traffic control, Wireless systems, MU-MIMO systems, Optoelectronics and Optical Communication.

Power Electronics: Power devices and components, Power quality control, FACTS, PFC, STATCOM, Harmonic analysis and compensations, Switching circuits and power converters, Motors and drives, Smart grid, Distribution generation and electrical vehicles, Wireless power transmission, Energy harvesting

Signal and Information Processing: Image processing, Computer vision, Bio-image processing, Audio/video processing, Data processing, Estimation and identification, Remote sensing, Information fusion, Brain computer interface, Signal transforming and filtering, Digital system design and structures, Optimization techniques, Compressive sensing

Invited and Special Sessions: The Technical Program Committee is soliciting proposals for invited and special sessions focusing on topics relevant to the theme of the conference. Prospective organizers should submit proposals to the Invited Session Chairs, Prof. Fanglin Luo (eflluo@ntu.edu.sg) or Prof. Weihai Chen (whchenbuaa@126.com) by the date listed in "Important Dates".

Best Paper Award: Selection of the best paper will be made at the conference based on both the technical content and presentation. The winner will be chosen by the Award Committee led by Prof. Wenjian Cai in consultation with the International Advisory Committee.

Paper Submission: Please submit full papers to the conference website at http://www.ieeeiciea.org. All submitted papers should be in the form of .pdf or .ps file and are to be limited to a maximum length of 6 pages (Letter size, single space, Times Roman of font size 10, two columns format), including figures, tables and references. Please use the template which is available from the website. Upon acceptance, authors will be required to register and present their papers. Papers will be published in the conference proceedings only if at least one of the authors is officially registered. Each registration covers a maximum of two papers.

In addition to the technical sessions, KEYNOTE ADDRESSES on the State-of-the-Art in various tracks of Industrial Electronics will be delivered.

Important Dates:

Extended Deadline for Full Paper submission Deadline for Invited and Special Sessions Notification of Acceptance Deadline for Camera Ready Manuscript Submission Deadline for Authors' Registration

31 December 2016 31 December 2016 15 February 2017 15 March 2017 15 April 2017

