

The 13th IEEE Conference on Industrial Electronics and Applications (**ICIEA 2018**) will be held during 31 May – 2 June 2018, in Wuhan, China. The Conference is organized by IEEE Industrial Electronics Chapter of Singapore, Wuhan University of Science and Technology, 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 2018 marks the 13<sup>th</sup> 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-control

**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, 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

**Robotics:** Computer vision, Visual Servoing, SLAM, LIDAR, Neuro-Linguistic Programming, Sensors and actuators, Sensor fusion, Motion control, Micro electromechanical systems, 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. Weihai Chen ([whchenbuaa@126.com](mailto:whchenbuaa@126.com)) or Prof. Cungang Hu ([hucungang@163.com](mailto:hucungang@163.com)) or Prof. Zhihong Man ([zman@swin.edu.au](mailto:zman@swin.edu.au)), 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.ieeeicicia.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** and **DISTINGUISHED LECTURES** on the State-of-the-Art in various tracks of Industrial Electronics will be delivered. Details will be on website.

### Important Dates:

Deadline for Full Paper submission	30 November 2017
Deadline for Invited and Special Sessions	15 December 2017
Notification of Acceptance	1 February 2018
Deadline for Camera Ready Manuscript Submission	1 March 2018
Deadline for Authors' Registration	1 April 2018

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- IEEE Singapore Section

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