

- Organizers**
- IEEE Industrial Electronics Chapter, Singapore
 - NingboTech University
 - Ningbo Institute of Materials Tech&Engn
 - Zhejiang Fashion Institute of Technology
 - IEEE Singapore Section

- Financial and Technical Co-Sponsor**
- IEEE Industrial Electronics Society

International Advisory Committee (TBD)

Bimal K. Bose, Univ. of Tennessee, USA
Wen Gao, Peking Univ., China
Zhengyou He, Southwest Jiaotong University
David Hill, The University of Sydney, Australia
John Y. Hung, Auburn University, USA
Zhong-Ping Jiang, Polytechnic Inst. of NYU,USA
Zongxia Jiao, Beihang University, China
Miroslav Krstic, Univ. of California, San Diego, USA
Andrew Kusiak, The University of Iowa, USA
Frank Lewis, Univ. of Texas at Arlington, USA
Chun Liang Lin, National Chung Hsing Univ. Taiwan
Nam Ling, Santa Clara Univ., USA
Susanto Rahardja, SIT, Singapore
Clarence de Silva, Univ. British Columbia, Canada
Yeng Chai Soh, NTU, Singapore
Hongye Su , Zhejiang University, China
Jun Wang, City University of Hong Kong, China
Qunjing Wang , Anhui Univ., China
Deren Yang, NingboTech University, China
Xinghuo Yu, RMIT University, Australia
Xianming Zhang , NingboTech University, China

Organizing Committee

Honorary Chairs	Deren Yang (China) Liping Wang (China)
General Chairs	Wenjian Cai (Singapore) Guilin Yang (China) Jun Qiu (China) Tingting Gao (China)
Secretaries	Fanglin Luo (Singapore) Meng Chen (China)
Financial Chairs	Jingbing Zhang (Singapore) Can Cui (China)
Publication Chairs	Lijun Jiang (Singapore) Tianjiang Zheng (China) Xinli Wang (China)
Publicity Chairs	Xing Zhu (Singapore) Hongwu Ye (China) Hui Cai (China)
Special Session Chairs	Wenxiang Xie (Singapore) Weiwei Chen (China) Changyun Wen(Singapore) Zaojun Fang (China) Jinhua Chen (China) Jili Tao (China) Tongyang Jiang (China) Yi Wang (China) Wei Wang(China) Silu Chen(China) Xin Zhang(China)
Workshop Chairs	Chinyin Chen (China) Mingyi He (China) Zhihong Man (Australia)
Local arrangement Chairs	Jie Zhang (China) Enjun Yu (China) Yahong Dai (China) Fei Li (China) Lin Zheng (China)
Technical Program Committee Chairs	Zhengguo Li (Singapore) Chi Zhang (China) Cungang Hu (China) Dan Zhang (China)

Contact:
ICIEA 2023 Secretariat
Email: secretariat@ieeeciea.org
URL: <http://www.ieeeciea.org>

ICIEA 2023

THE 18th IEEE CONFERENCE ON INDUSTRIAL ELECTRONICS AND APPLICATIONS

18 – 22 August 2023, Ningbo, China
<http://www.ieeeciea.org>

The 18th IEEE Conference on Industrial Electronics and Applications (**ICIEA 2023**) will be held during 18-22 August 2023, in Ningbo, China. The Conference is organized by IEEE Industrial Electronics Chapter of Singapore, NingboTech University, Ningbo Institute of Materials Technology and Engineering, Zhejiang Fashion Institute of Technology and IEEE Singapore Section. IEEE Industrial Electronics Society is the financial and technical sponsor. **The proceedings of past ICIEAs have been included in the IEEE Xplore database and indexed by EI Compendex. ICIEA is ranked in the top 15% of the best conferences in the field of Electronics and Electrical Engineering according to research.com.**

ICIEA 2023 marks the 18th 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:

Artificial Intelligence: Natural language processing & interaction, Text, image & video analysis, Speech recognition, Object recognition, Gesture recognition, Machine learning, Knowledge representation, Reasoning, Statistical learning, Deep learning, Neural networks, Design for AI chip and systems, AI applications

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, Digital twin technologies

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, Renewable energy, Demand side management, Solar photovoltaic and wind system, Energy meteorology, Green battery, Offshore systems

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, Fuzzy systems, Genetic algorithm, Evolutionary computing, Data mining

Robotics: Robotics vision, Visual servoing, Visual servoing simulation, SLAM, LIDAR, Sensors and sensor fusion, Actuators, Motion control, Robot-human collaboration, Remote operation, Autonomous mobile robot, Reinforcement learning, 3D simulation, Off-line programming, AI application in robotics, Industrial application case study

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, Electrical machines and Industrial drives, 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

•**Special Sessions:** The Technical Program Committee is soliciting proposals for special sessions focusing on topics relevant to the theme of the conference. Prospective organizers should submit proposals to the Special Session Chairs led by Dr. Wenxiang Xie (wxie@ieee.org) by the date listed in “Important Dates”.

•**Workshop on 22 August:** Topics to be determined. Proposals should be submitted to Workshop Chairs for review.

•**Best Paper Award:** The best paper award will be presented at the conference. The winner(s) will be selected based on both technical content and presentation by the Award Committee in consultation with the International Advisory Committee.

Paper Submission: Please submit full papers to the conference website at <http://www.ieeeciea.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 announced on website.

Important Dates:

Deadline for Full Paper submission	10 May 2023
Deadline for Invited and Special Sessions	10 May 2023
Notification of Acceptance	15 May 2023
Deadline for Camera Ready Manuscript Submission	31 May 2023
Deadline for Authors' Registration	25 June 2023

