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- IEEE Control Systems Society
- National Natural Sciences Foundation of China

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#### Contact:

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## ICIEA 2009

# THE 4<sup>th</sup> IEEE CONFERENCE ON INDUSTRIAL ELECTRONICS AND APPLICATIONS

25 - 27 May 2009, International Conference Center, Xi'an, P. R. China

<http://www.ieeeicicia.org>

The 4<sup>th</sup> IEEE Conference on Industrial Electronics and Applications (ICIEA'09) is organized by the IEEE Industrial Electronics (IE) Chapter of Singapore, Northwestern Polytechnical University(NPU) and IEEE Xi'an section. It will be held in Xi'an, China from 25<sup>th</sup> to 27<sup>th</sup> May 2009. Xi'an, the ancient capital city of 13 dynasties known as Chang'an and with more than 3,100 years of history, records the great changes of the Chinese nation just like a living history book. Specialists and scholars regard it as an inexhaustible treasure house of literature while heads of state from many countries and people from all over the world turn their eyes to this tourist attraction, trying to broaden their knowledge of Chinese civilization.

**The Proceedings of ICIEA are included in the IEEE Xplore database and indexed by EI Compendex and ISI Proceedings.**

ICIEA'09 is a premier conference, providing 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,

**Industrial Informatics:** Human-machine interactions, Diagnosis and prognosis, Intelligent automation, Intelligent transportation system, Manufacturing execution systems, Networked embedded controllers, Machine-to-machine, Condition based maintenance, SOA, Multi-agent systems.

**Computational Intelligence:** Artificial neural network, Fuzzy systems, Genetic algorithm, Evolutionary computing, Machine learning, Data mining

**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

**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

**Mechatronics:** Robotics, Sensors and actuators, Sensor fusion, High precision motion control, Micro electromechanical systems, industrial automation, Remote operation

**Power Electronics:** Power devices and components, Power quality control, FACTS, PFC, STATCOM, Harmonic analysis and compensations, Switching circuits and power converters, Motors and drives

**Signal Processing:** Image processing, Computer vision, Bio-image processing, Audio/video processing, Data processing, Estimation and identification, Remote sensing

**Network and Communication Technologies:** Network protocols, Mobile computing, Mobile ad hoc networks, Mobile agents, Network architectures, Quality of services, Cross-layer design/optimisation, Design and performance evaluation, Traffic control, Wireless systems

**Aerospace Electronic and Information System:** Design, integration, test or analysis of electronic components and systems. Acquisition, transmission, processing, fusion, management, simulation and display of information for aerospace systems

**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 Technical Co-Chairman, Dr. Zhihong Man via email [man.zhihong@eng.monash.edu.my](mailto:man.zhihong@eng.monash.edu.my) by 01 January 2009.

**Paper Submission:** Please submit full papers to the Conference website address <http://www.ieeeicicia.org> by **15 October 2008**. 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 (A4 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.

#### Keynote Speakers:

- Professor Bimal K. Bose, University of Tennessee, USA
- Professor David Dagan Feng, The University of Sydney, Australia
- Professor K.J Ray Liu, University of Maryland, USA
- Professor Yuanliang Ma, Northwestern Polytechnical University, China
- Professor Marios M. Polycarpou, University of Cyprus, Cyprus
- Professor Sigurd Skogestad, Norwegian Univ. of Science and Technology, Norway

#### Important Dates:

Deadline for Full Paper submission	15 October 2008
Notification of Acceptance	15 January 2009
Deadline for Camera Ready Manuscript Submission	01 March 2009
Deadline for Authors' Registration	01 April 2009

