



Call for papers



IEEE



The 18th Annual IEEE Conference on Industrial Technology (ICIT 2017)

IEEE ICIT 2017 is one of the flagship yearly conferences of the IEEE Industrial Electronics Society, devoted to the dissemination of new ideas, fast developing technologies and their applications within the fields of intelligent and computer control systems, power electronics, electric drives, transportation electrification, power systems, robotics, factory communications and automation, flexible manufacturing, vision systems, data acquisition and signal processing. The objectives of the conference are to provide high quality research and professional interactions for the advancement of science, technology, and fellowship. Participation in this conference just requires the ICIT-2017 registration fee.

Topics of interest include but are not limited to:

Power Electronics & Energy Conversion: power converters, power electronic devices, SiC MOSFET & SiC JFET technologies, PWM converters, integrated power electronics, modeling, simulation and control of power electronics, DC/DC, DC/AC, AC/DC conversion, AC/AC matrix converters, multilevel converters, high frequency links, soft switching techniques, active rectifiers, inverters, UPS, energy efficiency, power electronics for smart grid, EMI and EMC issues.

Chairs: Alexandre De Bernardinis (France), Ram Krishnan Maheshwari (India), Olivier Trescases (Canada), Ma Hao (China), Arnaud Gaillard (France).

Electrical Machines & Drives: special machines and actuators, multiphase motors, AC motor drives control and applications, observers and sensor-less methods, electrical machine design and modeling, thermal, noise and vibration issues in electrical machines, reliability, testing and diagnostics, fault detection in machines and drives, motion control, special application of machines and drives, HVAC, advanced traction control of electric vehicles and electric trains, electrical drives for ships and for aerospace. Advance techniques in real and off line simulation of industrial drives power system and electromechanical devices.

Chairs: Claudia Martis (Romania), Bhakti Joshi (India), Lakshmi Varaha Iyer (Canada), Haitham Abu Rub (Qatar).

Renewable Energy systems: wind, solar, and wave energy converters, nano-, pico-, and micro-hydro power generators, integrated renewable systems, hybrid electric vehicles, fuel cells, advanced batteries, energy storage devices and systems, offshore underwater converters, electric transportation and energy harvesting.

Chairs: Hua Geng (China), Rajeev Singh (India), Abhijit Choudhury (Singapore), Yushan Liu (Qatar), Adel Nasiri (USA).

Energy Storage: Specialty batteries, fuel cells, ultra-capacitors, battery technologies, fly wheels, hybrid storage, flow batteries, battery management systems, cell balancing technologies, energy storage for renewables, energy storage for transportation, power electronics for energy storage, uninterruptible power supplies and small storage systems.

Chairs: Alfonso Damiano (Italy), Federico Baronti (Italy), Dongpu Cao (UK), Nihal Kularatna (New Zealand), Ali Sari (France).

Transportation Electrification Systems: Electric propulsion, marine drive trains, railway drive trains, more electric aircraft, Vehicle to Home (V2H), power electronics for drive train, Vehicle to Grid (V2G), Vehicle to Vehicle (V2V), emerging charging technologies, charging infrastructure, wireless charging, energy storage for automotive, modeling, simulation of vehicle systems, intelligent vehicle control and autonomous vehicles

Chairs: Giambattista Grusso (Italy), Ritesh Keshri (India), Xuwei Pan (China), Hiroshi Fujimoto (Japan).

Power Systems and the smart grid: Large and small hydro generators, energy transmission and distribution, static VAR and harmonic compensations, FACTS, active and hybrid filtering, power quality devices, power management, modeling, simulation and control of power system, grid connect, distributed

power generation, diagnostics, smart grid technologies, intelligent control systems, multi-agent systems, global and constrained optimization, electricity market liberalization.

Chairs: Babak Nahid-Mobarakeh (France), Suryanarayana Doolla (India), Hatem Zeineldin (UAE).

Motion Control, and Mechatronics: intelligent mechatronics, Micro-electro-mechanical systems, high precision actuators, sensors, high precision positioning techniques, industrial mechatronic systems, sliding mode control, nano-scale servo systems, automotive motion control and innovative control strategies in advanced motion control.

Chairs: Jin Ye (USA), Deepak Fulwani (India), Toshiyuki Murakami (Japan).

Control System, Robotics and Automation: advanced control techniques, nonlinear and adaptive control, optimal and robust control, estimation and identification techniques, neural networks, fuzzy algorithms, evolutionary computing, intelligent control of robotics, autonomous mobile robots, tele robotics and teleoperation, humanoid robots, multi-robot systems, intelligent transportation, distributed collaborative systems, security & safety applications, human-robot interface, vision-based robots.

Chairs: Eric Cheng (Hong Kong), Rajesh Kumar (India), Peter Korondi (Hungary).

Sensors, Actuators, Systems Integration and Nano-technologies: intelligent sensors, actuators and multi-sensor fusion, micro-sensors and micro-actuators, micro-nano technology, electronic instrumentation, micro-electro-mechanical systems (MEMS), systems on chip (SoC), RF systems integration - integrated optics and related technologies. wireless and wire line communication circuits, polymer electronics.

Chairs: Yigeng Huangfu (China), Ridha Ben Mrad (Canada), Antonio Luque (Spain), Yasutaka Fujimoto (Japan).

Electronic System on Chip & Real Time Embedded Control: real time simulation algorithms, DSP and FPGA technologies, microprocessor and FPGA based control, real time implementation and control, VHDL applications, embedded systems, real-time distributed embedded systems, technologies for system design, electronic system on chip, design methodologies and tools.

Chairs: Max Mauro Santos (Brazil), Ray Chak-Chung Cheung (Hong Kong), Eric Monmasson (France), Marcian Cirstea (UK).

Signal and Image Processing & Computational Intelligence: computer vision, virtual reality systems, industrial vision, virtual instrumentation, image & sound processing, digital signal processing, remote sensing, multimedia applications, neural networks, fuzzy logic, genetic algorithms, industrial applications of intelligent controllers.

Chairs: Shen Yin (China), Manic Milos (USA).

Industrial Automation, Communication & Informatics: building automation, factory automation and communications, flexible manufacturing systems, industrial vision, motion control, autonomous mobile robots, electrical vehicles, intelligent transportation, industrial agents, integrated systems and processes, distributed collaborative systems, human-machine interfaces, security & safety applications, infrastructures for industrial informatics portable electronics, automation systems for power distribution, industrial applications of internet technologies, multimedia, and wireless communications.

Chairs: Xizheng Guo (China), Paulo Leitão Cheung (Portugal), Lucia Lo Bello (Italy).

Cloud Computing, Data Analytics, and Software Engineering:

cloud computing, deep learning, machine learning, convolutional learning, big data, data mining, text mining, artificial intelligence, social computing, decision support systems, data analytics and software engineering

Chairs: Thu-Trang Nguyen (France), Kim Fung Tsang (China).



Special sessions: The conference will include special sessions on highly specialized topic reporting technical trends and breakthroughs in the area of industrial electronics. Special sessions are organized at the initiative of one or more individuals, proposing NO MORE than 2 papers inside who must adhere to specific procedures published at the conference website. Special session topics must be in areas consistent with those of the ICIT 2017 conference theme. More than 30 special sessions on specific, emerging topics are being organized during the conference, and are open for submission.

Co-Chairs: Max Mauro Santos (Brazil), Yunwei (Ryan) Li (Canada), Yousef Ibrahim (Australia).

Submission of papers:

The working language of the conference is English. Submit the full paper using the following layout. Limitation to 6 full pages, including paper title, authors and affiliations, figures and references (maximum size 2MB). Authors are requested to prepare the manuscripts in the IEEE two-column format template and to translate it in PDF. No other format in the submission and in the final version can be accepted.

Manuscript submission link:
<http://vps.ieee-ies.org/submit/icit17/>

All accepted and presented papers will be published in an IEEE Proceedings volume and will be included in IEEE Xplorer.

IMPORTANT DEADLINES

Regular papers:

- a) **Deadline Full Paper Submission: Dec. 15th (EST), 2016**
- b) **Acceptance Notification: Jan. 15th, 2017**
- c) **Final Submission and Registration: Feb. 15th, 2017**

Special sessions:

- a) **Special Session Proposal: Dec. 15th, 2016**
- b) **Approved Special Sessions: Dec. 31st, 2016**
- c) **Paper Submission Deadline: Jan. 15th, 2017**
- d) **Notification of Acceptance: Jan. 31st, 2017**
- e) **Final Submission and Registration: Feb. 15th, 2017**

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