IEEE-ICIT 2019 AUSTRALIA

INTERNATIONAL CONFERENCE on INDUSTRIAL TECHNOLOGY

13 - 15 February 2019
Melbourne Convention and Exhibition Centre — Australia
Sponsor : IEEE Industrial Electronics Society
Technical Sponsor: Federation University Australia

Theme:

ADVANCED TECHNOLOGY IN RESOURCES INDUSTRY

CALL FOR PAPERS

Invitation to Participate in an Intellectually
Stimulating Conference & experience the Australian Culture

Submission Schedule:
Submission of Special Session Proposals: **1 June 2018**
Deadline for submission of full paper: **1 AUGUST 2018**
Notification of acceptance : **1 November 2018**
Deadline for final manuscript: **1 December 2018**

FOR FURTHER INFORMATION VISIT WWW.IEEE-ICIT2019.ORG

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SICE

Call for Papers

This Special ICIT Edition includes a Technical Track on:

Automation in Mining Engineering

The purpose of the conference is to provide a forum for presentation and discussion of emerging industrial technology. Also, it serves as a conduit for channelling advanced technology to industry. It brings together researchers, from industry and academia, active in industrial technological fields to discuss current developments and future perspectives. Therefore, the topics of this conference include, but are **not limited to**:

Automation in Mining Engineering: Robotic and Autonomous machinery in Mining Engineering, Automation, Control and Instrumentation of mining operation, autonomous vehicle, Mobile Conveyors Belts, Driverless Trucks, teleoperation of machinery, safety in mining automation systems. *(Chairs: M.Tuck, Australia, J. Ruiz-del-Solar, Chile; T. Peynot, Australia, V. Pozhidaeva, Bulgaria)*

Robotics, Mechatronics and Control Systems: Mechatronics systems, robotics, autonomous mobile robots, telerobotic and teleoperation, humanoid robots, multi-robot systems, intelligent transportation, security & safety applications, human-robot interface. Advanced control techniques, nonlinear and adaptive control, optimal / robust control, identification techniques, intelligent systems control, networked control, industrial control applications. *(Chairs: H. Hashimoto, Japan; Z. Gao, Australia; K. Ohishi, Japan; A. Laribi, France; T. Murakami, Japan)*

Electrical Machines and Drives: Special machines and actuators, multiphase motors, AC motor drives control and applications, observers and sensorless methods, electrical machine design and modelling, reliability, testing and diagnostics, fault detection in machines and drives, motion control, special application of machines and drives, HVAC. Advanced techniques in real and off-line simulation of industrial drives power system and electromechanical devices. *(Chairs: F. Betin, France; J. Zhu, Australia; S. Moreau, France; L. Parsa, USA)*

Power Electronics and Renewable Energy Conversion: Power converters, power electronic devices, SiC Mosfet & SiC JFET technologies, modulation techniques, modelling, simulation and control of power electronics, power conversion, AC/AC matrix converters, multilevel converters, fault tolerant converters, soft switching techniques, active rectifiers, inverters, energy efficiency and storage. renewable energy converters, nano, pico and micro-hydro power generators, hybrid/electric vehicles, fuel cells, energy storage systems, underwater converters, electric transportation, energy harvesting. *(Chairs: S. Bacha, France; C. Chakraborty, India; M. Liserre, Germany; J. Pinto, Brazil; H. Abu-Rub, Qatar)*

Power Systems and Smart Grids: Large and small hydro generators, energy transmission and distribution, static VAR and harmonic compensations, FACTs, active and hybrid filtering, power quality devices, power management, modelling, simulation and control of power system, grid interconnection, distributed power generation, diagnostics, smart grid technologies, intelligent control systems, global and constrained optimization, electricity market liberalization. *(Chairs: C. Cecati, Italy; P. Palensky, Netherland; T. Saha, Australia, S. Valtchev, Portugal)*

Sensors, Actuators and Micro-Nanotechnology: Intelligent sensors, actuators and multi-sensor fusion, micro-sensors and micro-actuators, micro-nano technology, electronic instrumentation, micro-electro-mechanical systems (MEMS), RF systems integration, integrated optics and related technologies, polymer electronics, nanotechnology, biomedical engineering, microfluidics, lab-on-chip devices and technologies, MOEMS, RF-MEMS. *(Chairs: K-H. Jo, South Korea, Y. Fujimoto, Japan; A. Malinowski, USA)*

Cloud Computing, Big Data and Software Engineering: Cloud computing, big data, data analysis and extraction, computer networking, communication protocols, telecommunication, algorithms, distributed systems, industrial database applications, service oriented architecture, service integration, communication standards, internetworking, mobile communication, information security and trust. *(Chairs: H. Gao, China; G. Karmakar, Australia; S. Yin, China; M. Gidlund, Sweden)*

Electronic Systems on Chip and 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 (SoC), design methodologies and Electronic Design Automation (EDA) tools. *(Chairs: S. Nihtianov, Netherland; R. Cheung, Hong Kong; M. Hilairet; France)*

Signal and Image Processing and 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: S-W. Wei, Australia; W. He, China; Y-C. Tian, Australia)*

Industrial Automation, Communication, Networking and Informatics: Factory and Building automation, flexible manufacturing systems, industrial vision, 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, IoT, wired and wireless communications, power line communication. *(Chairs: V. Vyatkin, Finland; K. Tsang, Hong Kong; T. Strasser, Austria; L. Lo Bello, Italy; Y. Shi, Canada)*

Systems Reliability, Conditions Monitoring and Fault Diagnosis: System's Reliability testing and Risk Analysis, Fault Diagnostic and Recovery, FMECA, FTA. *(Chairs: S. Wilcox, Australia; M. Iwasaki, Japan)*

Education: Project/Problem-based Learning; eLearning; Virtual Laboratory, Distance Education and Flexible Learning; Challenges and Solutions of Learning by Team-work in Distance Education. *(Chairs: Y-S. Lai, Taiwan; A. Chen, USA; O. Lucia, Spain)*

Special Sessions: **The conference will include Special Sessions on highly specialised topic areas, within the scope of the conference and its theme. Special Sessions are organised at the initiative of one or more individuals, who must adhere to the specific procedures published at the conference website.**

Papers Submission: Prospective authors are invited to submit full papers (double column, six pages maximum) in English using the online paper submission system located at conference website **WWW.IEEE-ICIT2019.ORG**

Pre- and post-conference tours: Melbourne has been internationally voted, 7 years in a row, as the world's *"Most Liveable City".* Please consult with the conference website regarding the variety of tours available.

Accepted and presented papers will be published in an IEEE proceedings volume and also will be submitted for the International Publication in *IEEExplore*

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