

# The 28<sup>th</sup> IEEE International Symposium on Industrial Electronics

12-14 June 2019, Vancouver, Canada



## Honorary Chairs

Kamal Al-Haddad (Canada)  
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## International Advisory Board

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## Important Dates

Special Session Proposals: **Jan. 31, 2019**  
Full Paper Submission: **Feb. 28, 2019**  
Acceptance Notification: **Mar. 15, 2019**  
Final Submission of Full Manuscript:  
**Apr. 15, 2019**  
Early Bird Registration: **Apr. 15, 2019**

## Conference website:

[www.ieee-isie2019.org](http://www.ieee-isie2019.org)

Email: [ieee.isie2019@gmail.com](mailto:ieee.isie2019@gmail.com)



## CALL FOR PAPERS

### Technical Tracks

#### Power Systems and Smart Grid

Power Systems, Transmission, Power Quality, Utility Applications, Smart Grid  
*Pierluigi Siano (Italy), Stanimir Valchev (Portugal), Mingxi Liu (USA)*

#### Electrical Machines and Industrial Drives

AC/DC Motor Drives, Electrical Machines Design/Modelling, Thermal/Vibrations Issues  
*Franck Betin (France), Andrea Cavagnino (Italy), Leila Parsa (USA)*

#### Control Systems and Applications

Advanced Control Systems, Motion Control, Data Driven Control and Monitoring  
*Michael Ruderman (Norway), Zhenwei Cao (Australia), Jiahui Qin (China)*

#### Power Electronics and Energy Conversion

Power Electronics Modelling, Simulation, Design, Control, DC/DC Conversion, AC/AC Converters, Rectifiers, Inverters, PWM Systems  
*Haitham Abu-Rub (Qatar), Seddik Bacha (France), Chandan Chakraborty (India), Fang Fang (China)*

#### Renewable Electric Energy Conversion, Processing and Storage

Wind Energy, Photovoltaics, Hydro-Power, Battery Technologies, Fuel Cells, Energy Storage Technologies  
*Concettina Buccella (Italy), Chengbin Ma (China), Xinbo Ruan (China)*

#### Mechatronics and Robotics

Mechatronics, Robotics, Human-Machine Interface Technology, Control of Linear and Non-linear Systems, Adaptive, Robust and Variable Structure Control  
*Yasuharu Kunii (Japan), Peter Korondi (Hungary), Toshiyuki Murakami (Japan), Kang-Hyun Jo (South Korea)*

#### Distributed and Networked Control Systems for Industrial Applications

Distributed Event-Triggered Filtering and Control, Communication Protocol and Control, Distributed Network-Based Leader-Following Consensus, Network-Based Tracking Control, Sampled-Data Control and Filtering  
*Wangli He (China), Huazhen Fang (USA), Feng Xiao (China)*

#### Industrial Informatics and Cloud Computing

Industrial Control and Computing Paradigms, Artificial Intelligence Applications, Industrial Network Design, Cloud Computing, Cyber and Network Security  
*Gerhard Petrus Hanneke (Hong Kong), Mikael Gidlund (Sweden), Valeriy Vyatkin (Finland), Wing Kuen Ling (China)*

#### Factory Automation and Industrial Informatics

Remote Sensing, Process Automation, Flexible Manufacturing Systems, Industrial Agents, Factory Automation, Safety and Reliability  
*Johan Akerberg (Sweden), Lucia Lo Bello (Italy), Stamatis Karnouskos (Germany)*

#### Electronic Systems-on-Chip & Embedded Systems

Microelectronics, HDL or High Level Language Hardware Design, System-on-chip Design, FPGAs, Embedded Systems  
*Michael Hilaiet (France), Marc Perron (Canada), Carmen Aracil (Spain), Eric Monmasson (France), Ray Cheung (Hong Kong)*

#### Computational Intelligence

Neural Networks, Fuzzy Logic, Genetic Algorithms, Image Processing  
*Kang-Hyun Jo (South Korea), Wei He (China), Chao Shen (Canada)*

#### Sensors, Actuators and Micro-/Nanotechnology

Sensors, Signal/, Audio / Video Applications, Networking Applications, Communication Systems, Measurements & Data Acquisition, Nanoelectronics, MEMS  
*Sehoon Oh (South Korea), Yasutaka Fujimoto (Japan), Peter Xu (New Zealand), Aleksander Malinowski (USA)*

#### Advanced Transportation Technologies

Electric Propulsion, Automotive Applications, Electric and Hybrid Electric Vehicles  
*Hui Zhang (China), Dongpu Cao (Canada), Fei Gao (France)*

#### Building Automation, Control and Management

Intelligent Environment, Building Management, Building Automation  
*Jan Haase (Germany), Joern Ploennigs (Ireland), Kim Fund Tsang (Hong Kong)*

#### Engineering Education

Educational Tools, Continuous Learning, Educational Materials and Methods, Distance Learning, Information and Communication Technologies in Laboratories, University-Industry Collaboration  
*Oscar Luc á (Spain), Joao Martins (Portugal), Andreja Rojko (Germany), Li Qiu (China)*

#### Entrepreneurship and Management – Challenges for Industrial Electronics

*Michael Condry (USA), Robert Bierwolf (Netherlands)*

#### Industrial Cyber-Physical Systems

*Armando Walter Colombo (Germany), Huiping Li (China), Jose Lastra (Finland)*

### Special Session

Prospective participants of ISIE 2019 are encouraged to organize special sessions in a particular area within the symposium topics.

### Paper Submission

Prospective authors are invited to electronically submit regular papers of their work in English (full paper length: up to 6 proceedings pages). Accepted and presented paper will be copyrighted to IEEE and published in conference proceedings, which will be eligible for inclusion in the IEEE Xplore online Digital Library and EI Compendex database.





**Stanley Park** is a lush peninsula park of huge trees adjacent to Downtown Vancouver. A paved seawall path encircles the green space, and most visitors take the time to explore on foot or by bicycle. Inland, the park offers many things to do, and visitors can spend a full day exploring attractions ranging from the totem poles at Brockton Point to the west coast sea life at the Vancouver Aquarium. Spectacular views are a standard throughout the park.



The oldest part of the city, **Gastown** is an area of restaurants, galleries, and shops set in carefully restored Victorian buildings. Heritage structures, cobblestone streets, and iron lamp-posts give the district its distinctive atmosphere. Gastown came into existence in 1867 when a man called John Deighton arrived on the scene. Tourists stop for photos with Gassy Jack, and also love to visit the nearby Steam Clock, which puffs steam-powered chimes every 15 minutes.



For many Vancouver visitors, **Canada Place** is where a trip begins. The unusual roof creates the impression of a huge sailing vessel. The architecturally remarkable structure is part cruise ship terminal, part convention center and hotel, and part hub for sightseeing bus tours. At the end of the pier, there are panoramic views and the Flyover Canada attraction - a fun flight simulator and Canadian geography lesson. Also nearby, Waterfront Station is a major transit hub with ferries departing for the public market at Lonsdale Quay in North Vancouver.

## Vancouver Accessibility

### Arriving by Air

If you're arriving by air, you'll most likely be flying into Vancouver International Airport (YVR). Located just 25 minutes from downtown, YVR is consistently rated one of the best airports in North America. There are more than a dozen international flights in and out of YVR every day.

### Getting to/from the Airport

#### Car

Many major car rental companies have desks at YVR, so hiring and returning your rental car is easy and convenient. Driving between downtown and the airport is straightforward and well sign-posted. From downtown, proceed south on Granville Street to West 72nd Avenue. Follow the road left onto SW Marine Drive and over the Arthur Laing Bridge. The bridge takes you to Grant McConachie Way, which leads directly to the airport terminal.

#### Taxi

If you're taking a taxi from the airport to your hotel after arriving at YVR, use one of the taxi stands located on Level 2. Taxis operating from the airport are licensed, and will use a zoned fare rate that will depend on your destination.

#### Public Transit

The SkyTrain's Canada Line provides rapid rail service linking YVR to downtown Vancouver and parts of Richmond. Trains leave the airport station approximately every seven minutes during most times of the day. There are 16 stops along the line, with downtown Vancouver stops including Yaletown, Vancouver City Centre and Waterfront—the terminus for the line. The trip from YVR to downtown Vancouver takes only 26 minutes on a two zone fare of \$3.75, plus the \$5.00 Canada Line YVR AddFare.

