

2019 IEEE International Conference on Industrial Cyber-Physical Systems (ICPS2019)
2019 IEEE International Conference on Multisensor Fusion and Integration for
Intelligent Systems (MFI2019)

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Special Session on

“Smart Grid and Energy Cyber-Physical Systems”

organized by

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Call for Papers

The smart grid-cyber-physical system (sg-CPS) is a complex network whose operations are monitored, coordinated, controlled, and integrated by computing and communication. Advancements in data analytics and artificial intelligence, such as sensing and machine learning, optimization, and controls, will further unlock the significant potential of the smart grid to adequately address current pressing issues of energy reliability, sustainability, and security. This special session focuses on the introduction of new applications, advanced sensing and data management solutions, innovative control design and operational methodologies, and robust cybersecure protection mechanisms. Key benefits include enhanced energy efficiency and cost-effectiveness of distributed and renewable energy resource management, operational agility and flexibility in dynamic power systems, and safety and resilience of interdependent critical energy and communication infrastructures.

Topics of interest include, but are not limited to:

- ✓ Technologies and applications of data analytics in sg-CPSs
- ✓ Interoperability in smart grid networks
- ✓ Machine learning and control frameworks to improve sg-CPS performance
- ✓ Design, optimization, and data-driven applications of energy systems
- ✓ Novel sensor methodologies, techniques, and tools that enhance energy efficiency, energy reliability, durability, and comfort
- ✓ Distributed generation, alternative energy, renewable sources, and energy storage in the smart grid
- ✓ Security and privacy analysis and protection mechanisms in sg-CPS
- ✓ Smart grid cyber security

Submissions Procedure: All the instructions for paper submission are included in the conference website <http://icps19.org/final-paper-submission>

Deadlines:

Reception of full paper:	November 30, 2018
Paper acceptance notification:	January 31, 2019

