

# IEEE SMC 2015

IEEE INTERNATIONAL CONFERENCE ON  
SYSTEMS, MAN, AND CYBERNETICS

October 10-13, 2015, Hong Kong

<http://www.smc2015.org>



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## SMC 2015 Call for papers

The 2015 IEEE International Conference on Systems, Man, and Cybernetics (SMC2015) will be held in Hong Kong. SMC2014 is the flagship conference of the IEEE Systems, Man, and Cybernetics Society. It provides an international forum for researchers and practitioners to report up-to-the-minute innovation and development, summarize the state-of-the-art, and exchange ideas and advances in all aspects of systems science and engineering, human machine systems, and cybernetics. The conference theme is:

### Big Data Analytics for Human-Centric Systems

Humans, software, and hardware are routinely combined to form systems to meet needs of ever-increasing scope and application. Pervasive sensors distributed across a range of temporal and geographic scales now make unprecedented data sets available. These data can be used to understand and support how systems function, how they can reflect human needs and capabilities, and how they can be improved. Considerable barriers still exist to harnessing these data to address the complexity of real-world applications and simulations. Human systems need well-considered analytic approaches that reflect an understanding of human cognitive work. Software and hardware systems need architectures and tools that are efficient, fault-tolerant and well-suited to human needs. This conference seeks to engage the SMC community to address these issues and to craft new discoveries and applications that will shape how society views and uses big data.

### Systems Science & Engineering

Systems modelling  
Systems analysis  
Formal methods  
Simulation  
Validation and verification  
Engineering lifecycle (definition, development, and deployment)  
Systems management  
Systems engineering processes  
Optimization (single objective and multiobjective)  
Hierarchy of systems  
Interaction  
Agent and multi-agent systems  
Collaboration  
Game theory and applications  
Conflict resolution  
Consensus  
Distributed systems  
Fault tolerance  
Production systems  
Decision support architectures  
Asset allocation  
Social networks  
Recommender systems

### Human-Machine Systems

Assistive Technology  
Augmented Cognition  
Brain-based Information Communications  
Design Methods  
Entertainment Engineering  
Human-Computer Interaction  
Human Factors  
Human Performance Modelling  
Human-Machine Cooperation  
Human-Machine Interface and Communications  
Web Intelligence and Interaction  
Information Visualization  
Information Systems for Design/Marketing  
Virtual and Augmented Reality Systems  
Interactive and Digital Media  
Interactive Design Science and Engineering  
Kansei (sense/emotion) Engineering  
Medical Informatics  
Multimedia Systems  
Multi-User Interaction  
Resilience Engineering  
Supervisory Control  
Safety  
Team Performance and Training Systems  
User Interface Design  
Wearable Computing

### Cybernetics

Ambient Intelligence  
Artificial Immune Systems  
Artificial Life  
Biometrics  
Bioinformatics  
Computational Intelligence  
Computational Life Science  
Evolutionary Computation  
Expert Systems  
Fuzzy Systems  
Image and Signal Processing  
Knowledge-Based Systems  
Information Assurance  
Intelligent Multimedia Processing  
Intelligent Internet Systems  
Knowledge Acquisition  
Machine Learning  
Machine Vision  
Medical Informatics  
Neural Networks  
Optimization  
Pattern Recognition  
Self-Organization  
Smart Environment  
Swarm Intelligence

## Important Dates

Submission due: **March 31, 2015**  
Notification of acceptance: **June 1, 2015**  
Author registration deadline: **July 10, 2015**  
Camera-ready deadline: **July 20, 2015**

## Call for Special Sessions

Proposals to organize Special Sessions are strongly encouraged. Special Sessions must be related to the conference theme or especially hot topics within the conference scope. All submitted papers undergo the same review process, and submission to proposed sessions is not a guarantee of acceptance.

## Call for Contributed Papers

Prospective authors are invited to submit their full-length papers electronically through the conference website. Each paper should be concise with sufficient detail and references to allow critical review. Papers will be reviewed by at least two referees for technical merit and content. Accepted papers will appear in the conference proceedings on the Xplore only if one of the authors is registered for the conference and presents the paper at the conference.