

IEEE SMC 2015

IEEE INTERNATIONAL CONFERENCE ON
SYSTEMS, MAN, AND CYBERNETICS

October 9-12, 2015, Hong Kong

<http://www.smc2015.org>



Honorary Chair

Way Kuo
City University of Hong Kong,
Hong Kong

General Chairs

Sam Kwong
City University of Hong Kong,
Hong Kong

Daniel Yeung
South China University of
Technology, China

Program Chairs

Tin Kam Ho
IBM Watson Research,
United States

Witold Pedrycz
University of Alberta,
Canada

Christopher Nemeth
Applied Research Associates,
Inc., United States

Organization Chair

Patrick Chan
South China University of
Technology, China

Publication Chair

Raymond Wong
City University of Hong Kong,
Hong Kong

Registration Chair

Daniel Ho
City University of Hong Kong,
Hong Kong

Special Session Chairs

James Liu
Hong Kong Polytechnic
University, Hong Kong

Maria Pia Fanti
Polytechnic of Bari, Italy

Awards Committee Chair

Hong Yan
City University of Hong Kong,
Hong Kong

Workshop Chairs

Yutaka Hata
University of Hyogo, Japan

Lance CC Fung
Murdoch University,
Australia

Tutorial Chair

Andreas Nürnberger
Otto-von-Guericke-
Universität Magdeburg,
Germany

Local Arrangement Chair

Giovanna Yau
City University of Hong Kong,
Hong Kong

SMC 2015 Call for papers

The 2015 IEEE International Conference on Systems, Man, and Cybernetics (SMC2015) will be held in Hong Kong. SMC2015 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
Robotic 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:
Notification of acceptance:
Author registration deadline:
Camera-ready deadline:

~~March 31, 2015~~ extended to **April 15, 2015**
June 1, 2015
July 10, 2015
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 be presented in oral or poster sessions. All accepted papers which have been presented at SMC 2015 will be published in the conference proceedings on the IEEE Xplore.