IEEE SMC 2015

IEEE INTERNATIONAL CONFERENCE ON SYSTEMS, MAN, AND CYBERNETICS

October 9-12, 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. 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

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 extended to April 15, 2015

Wearable Computing

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 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.