



2010 IEEE International Conference on  
Systems, Man, and Cybernetics: **SMC 2010**  
10-13 October 2010, Istanbul, TURKEY  
<http://www.smc2010.org>



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**Theme:**

The 2010 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2010) provides an international forum that brings together those actively involved in areas of interest to the IEEE Systems, Man, and Cybernetics Society, to report on up-to-the-minute innovations and developments, to summarize the state-of-the-art, and to exchange ideas and advances in all aspects of systems science and engineering, human machine systems, and cybernetics. For this purpose, contributions covering theoretical developments and practical applications, including but not limited to the technical areas listed in the table below are invited.

For 2010, the theme of the conference is chosen as:

***Intelligent Systems for a Safe and Secure World***

Our quality of life heavily depends on the reliable operation of large-scale critical infrastructures, such as electric power systems, telecommunication networks, and water distribution networks. The design, monitoring, control and security of such systems, as well as their management, are becoming increasingly more challenging as their size, complexity and interactions are steadily growing. These challenges can only be met with appropriate advances in Systems Science and Engineering, Human-Machine Systems, and Cybernetics. Papers related to this conference theme are especially solicited, including theories, methodologies and applications.

**Important Dates:**

**Feb. 1, 2010:** Deadline for submission of proposals for Special Sessions.

**March 15, 2010:** Deadline for submission of full-length papers for Regular and Special Sessions.

**April 15, 2010:** Deadline for submission of proposals for Tutorial/Workshop Sessions.

**May 15, 2010:** Acceptance/Rejection notification for Tutorial/Workshop Sessions.

**May 15, 2010:** Acceptance/Rejection notification for regular papers and special session papers.

**June 27, 2010:** Final camera-ready papers due in electronic form and deadline for submitting tutorial/workshop materials.

**Call for Regular Sessions Papers:**

Prospective authors are invited to submit their full-length papers electronically through the conference website. Each paper should be concise, but contain sufficient detail and references to allow critical review. Each paper will be judged by at least two referees.

**Call for Special Sessions:**

The goal of Special Sessions (SS) is to provide a focused discussion of new or innovative topics. SS organizer(s) must collect at least five papers. An individual can download an SMC 2010 SS proposal form from SMC 2010 official site, and send a full-filled form to the SS Chair. SS papers will be reviewed with the same criteria as Regular Session papers.

**Technical Areas**

**Systems Science & Engineering**

Communications  
Conflict Resolution  
Consumer and Industrial Applications  
Control of Uncertain Systems  
Cooperative Systems and Control  
Decision Support Systems  
Discrete Event Systems and Petri Nets  
Distributed Intelligent Systems  
Enterprise Information Systems  
Fault Monitoring and Diagnosis  
Intelligent Power Grid  
Smart Metering  
Infrastructure Systems and Services  
Homeland Security  
Intelligent Green Production Systems  
Intelligent Transportation Systems  
Large-Scale/Complex Syst., Sys. of Systems  
Manufacturing Systems & Automation  
Mechatronics  
Micro and/or Nano Systems  
Quality/Reliability Engineering  
Robotic Systems  
Service Systems and Organizations  
Smart Sensor Networks  
System Modeling & Control

**Human-Machine Systems**

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

**Cybernetics**

Agent-Based Modeling  
Artificial Immune Systems  
Artificial Life  
Biometric systems and Bioinformatics  
Computational Intelligence  
Computational Life Science  
Cybernetics for Informatics  
Evolutionary Computation  
Expert & Knowledge-based Systems  
Information Assurance & Intelligent Multimedia  
Computation  
Heuristic Algorithms  
Hybrid models of NN, Fuzzy Systems & Evolutionary Computing  
Image Processing/Pattern Recognition  
Fuzzy Systems and Their applications  
Intelligent Internet Systems  
Knowledge Acquisition in Intelligent Systems  
Machine Learning  
Machine Vision  
Media Computing  
Medical Informatics  
Neural Networks and Their Applications  
Optimization & Swarm Intelligence  
Self-Organization