IEEE SMC 2023
Maui, Hawaii

IEEE SMC 2023

International Conference on Systems, Man, and Cybernetics

Maui, Hawaii, October 1- 4, 2023

The 2023 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2023) is the flagship conference of the IEEE Systems, Man, and Cybernetics Society. It provides an international forum for researchers, educators, and practitioners to learn, share knowledge, report most recent innovations and developments, and exchange ideas and advances in all aspects of systems science and engineering, human-machine systems, and cybernetics. The theme of the SMC 2023 conference is 'Improving the Quality of Life". Contributions to theory and practice, including but not limited to, the following technical areas, are invited:

Systems Science & Engineering

- Adaptive Systems
- Autonomous Systems
- Communications
- Conflict Resolution
- Consumer and Industrial Applications
- Control of Uncertain Systems
- Cooperative Systems and Control
- Cyber-physical Systems
- Decision Support Systems
- Digital Twins
- Discrete Event Systems
- Distributed Intelligent Systems
- Electric Vehicles and Electric Vehicle Supply Equipment
- Enterprise Information Systems
- Fault Monitoring and Diagnosis
- Homeland Security
- Infrastructure Systems and Services
- Intelligent Green Production Systems
- Intelligent Power Grid
- Intelligent Transportation Systems
- Large-Scale System of Systems
- Manufacturing Automation and Systems
- Mechatronics
- Micro and Nano Systems
- Quality and Reliability Engineering
- Robotic Systems
- Service Systems and Organizations
- Smart Buildings, Smart Cities and Infrastructures
- Smart Metering
- Smart Sensor Networks
- Space Systems
- System Architecture
- System Modeling and Control
- Technology Assessment
- Trust in Autonomous Systems

Human-Machine Systems

- Affective Computing
- Assistive Technologies
- Augmented Cognition
- Biometrics and Applications
- Brain-Computer Interfaces
- Cognitive Computing
- Companion Technology
- Cooperative Work in Design
- Entertainment Engineering
- Environmental Sensing, Networking and Decision-Making
- Ethics of AI and Pervasive Systems
- Haptic Systems
- Human-Centered Transportation
- Human-Collaborative Robotics
- Human Enhancements
- Human-Machine Interaction
- Human Factors
- Human Perception in Multimedia
- Human Performance Modeling
- Human Space Flight
- Information Systems for Design and Marketing
- Intelligent Assistants
- Interactive and Digital Media
- Kansei Engineering
- Medical Informatics
- Multimedia Systems
- Resilience Engineering
- Shared Control
- Systems Safety and Security
- Team Performance and Training
- Telepresence
- User Interface Design
- Virtual/Augmented/Mixed Reality
- Visual Analytics/Communication
- Wearable Computing

Cybernetics

- Agent-Based Modeling
- AIoT
- AI and Applications
- Artificial Immune Systems
- Artificial Social Intelligence
- Artificial Life
- Big Data Computing
- Biometric Systems and Bioinformatics
- Cloud and Robotics Integration
- Complex Networks
- Computational Intelligence
- Computational Life Science
- Cybernetics for Informatics
- Cyborgs
- Deep Learning
- Evolutionary Computation
- Expert and Knowledge-Based Systems
- Fuzzy Systems and their Applications
- Metaheuristic Algorithms
- Hybrid Models of Computational Intelligence
- Image Processing and Pattern Recognition
- Computational Intelligence in Information Assurance
- Intelligent Internet Systems
- Knowledge Acquisition
- Machine Learning
- Machine Vision
- Media Computing
- Neural Networks and their Applications
- Optimization and Self-Organization Approaches
- Quantum Cybernetics
- Quantum Machine Learning
- Representation Learning
- Soft Computing
- Socio-Economic Cybernetics
- Swarm Intelligence

The 13th Workshop on Brain-Machine Interface (BMI) Systems will be held as part of IEEE SMC 2023.
The BMI Workshop is organized by the IEEE SMC Technical Committee on Brain-Machine Interface Systems.
Participation is free to all registered IEEE SMC 2023 attendees.

Timeline

Special Session/Workshop/Tutorial/ Proposals: 15.02.2023

Special Session/Workshop/Tutorial Acceptance Note: 01.03.2023

Full Paper Submission: **15.04.2023**

Paper Acceptance Note: 20.05.2023

Final Paper Submission: 01.07.2023

Early Registration: 15.07.2023

Late Registration: 25.09.2023

Advisory Committee

Imre Rudas (Chair), Sam Kwong, Vlad Marik, Saeid Nahavandi, Ljiljana Trajkovic, Edward Tunstel

Organizing Committee

General Chair: Adrian Stoica

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Program Chair: Vladik Kreinovich

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Keynotes Chair: Enrique Herrera-Viedma

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Organization and Planning Chair: Chris Nemeth

Future Directions Forum Chair: Okyay Kaynak

Women in Engineering Chair: Karen Panetta

Student Activities Chair: Satyam Mohla

New Faculty Colloquium Co-Chairs: David Kaber and David Mendonca

More organizers on the conference website

BMI Workshop Organizers

Honorary Chair: Michael H Smith
General Co-Chairs: Tiago H. Falk, Ljiljana Trajkovic, Christoph Guger