

MSC

SAN ANTONIO 2008



FINAL CALL FOR PAPERS

IEEE MULTI-CONFERENCE ON SYSTEMS & CONTROL

September 3-5, 2008, San Antonio, Texas (USA)

ORGANIZING COMMITTEE

General Chair
Oscar González
Old Dominion University, USA

Program Chair (CCA)
Gary Balas
University of Minnesota, USA

Program Chair (CACSD)
Marco Lovera
Politecnico di Milano, Italy

Program Chair (ISIC)
Kevin Moore
Colorado School of Mines, USA

Invited Session Chair (CCA)
Luigi Glielmo
Università del Sannio, Italy

Invited Session Chair (CACSD)
Nikos Karampetakis
Aristotle University of Thessaloniki,
Greece

Invited Session Chair (ISIC)
Warren Dixon
University of Florida, USA

Workshops Chair
Suresh Joshi
NASA Langley Research Center, USA

Best Student Paper Award Chair
Lalit K. Mestha
Xerox Research Center, USA

IEEE CSS Conference
Editorial Board Chair
Thomas Parisini
University of Trieste, Italy

IEEE CSS Paperplaza Chair
Pradeep Misra
Wright State University, USA

IEEE CSS Financial Support Chair
Luis Alvarez-Icaza
Universidad Nacional Autónoma de México

Publication Chair
Raúl Ordoñez
University of Dayton, USA

Registration Chair
Simon Hecker
German Aerospace Center, Germany

Finance Chair
Dimitrie Popescu
Old Dominion University, USA

Exhibits Chair
Michael R. Moan
Raytheon, USA

Publicity Chair
Fabio Previdi
Università di Bergamo, Italy

Local Arrangements Co-Chairs
Chujiang "CJ" Qian
The University of Texas at San Antonio,
USA
Michael T. Frye
University of the Incarnate Word, USA



Background and scope

The 2nd IEEE Multi-conference on Systems and Control (MSC), to be held at the Hilton Palacio del Rio in San Antonio, Texas, September 3-5, 2008, gathers up three of the major international conferences promoted by the IEEE Control Systems Society: the International Conference on Control Applications (CCA) –initiated in 1992– with a view to promote and encourage industrial participation in the activities of the IEEE Control Systems Society; the International Symposium on Computer-Aided Control Systems Design (CACSD) –initiated in 1991– and the International Symposium on Intelligent Control (ISIC) –initiated in 1985. It provides a unique opportunity for researchers and practitioners from different areas to discuss the state-of-the-art and the future directions in advanced control technology, intelligent systems and tools for control systems design. The conference welcomes contributed paper, invited session, tutorial session, and pre-conference workshop submissions presenting new research results and perspectives on future developments, covering a broad range of topics relevant to control applications and methods.

Invitation and venue

The Organizing Committee is pleased to invite you to participate in the **2008 MSC** conference, to be held Wednesday through Friday, September 3 to 5, 2008, at the Hilton Palacio del Rio Hotel in the city of San Antonio, Texas, USA. The Hilton Palacio del Rio is located on the famous River Walk, a unique network of walkways lined with cafes, restaurants, and shops next to the historic downtown attractions such as the Alamo. San Antonio, the second largest city in Texas, is a popular tourist attraction. In addition to historical and cultural sites, it is home to two theme parks: SeaWorld and Six Flags Fiesta Texas.

Call for papers

Contributed papers, as well as invited and tutorial session proposals need to be submitted electronically through the IEEE CSS conference management system at <http://css.paperplaza.net>. Please refer to the conference web site for the most up-to-date information about the conferences. The Program Committees also solicit proposals for **preconference workshops** within the technical scope of the conferences.

Important deadlines

Papers/workshops submission:	January 30, 2008
Invited & tutorial sessions submission:	January 30, 2008
Notification of acceptance:	April 15, 2008
Deadline to apply for Student Travel Support and Conference Support for Developing Nations	April 25, 2008
Final paper submission:	May 15, 2008



For further information please consult the **2008 MSC** website at <http://conferenze.dei.polimi.it/msc08>.

Sponsors

The **2008 MSC** is sponsored by The Institute of Electrical and Electronic Engineers (IEEE), Control Systems Society (CSS), and organized in cooperation with the European Union Control Association (EUCA).



Research Topics

CCA

- Aerospace and automotive systems
- Marine systems
- Agricultural systems
- Mining systems
- Biomedical and chemical processes
- Biological and pharmaceutical processes
- Metal processing
- Power systems
- Mechanical systems and robotics
- Mechatronic systems
- Telecommunications
- Transportation systems
- Mathematical modeling
- System identification
- Fault diagnosis
- Fault tolerant control
- Predictive and adaptive control
- Discrete event systems
- Hybrid systems
- Robust control
- Vehicular and traffic control
- Integrated control and supervision
- Fuzzy and neural control, Petri nets
- Distributed intelligent networked systems

CACSD

- CACSD applications and case studies
- CACSD environments for systems analysis and design including toolboxes
- Computer-aided modeling and simulation
- Computer-aided model calibration and system identification
- Computer-based teaching and learning environments
- Embedded and networked systems design and implementation
- Numerical methods for system analysis and design
- Optimization-based control systems analysis and design
- Rapid prototyping, real-time aspects and target specific code generation
- Soft-computing algorithms
- Symbolic methods for systems and control
- Tools for industrial controller design, monitoring and tuning
- Tools for multi-disciplinary test and integration

ISIC

- **Autonomous Systems**
Robotics and unmanned systems; intelligent behavior generation; architectures for autonomy; autonomous manufacturing and industrial systems; planning and decision-making for autonomy; cooperative autonomous systems.
- **Architecture and Software for Intelligent Control**
Next generation intelligent control architectures and methods; distributed embedded systems; embedded intelligent controllers.
- **Computational Intelligence Methods**
Neural networks; fuzzy systems; genetic algorithms; probabilistic approaches.
- **Distributed-Information Systems**
Multi-agent based planning, control and intelligence; swarm intelligence, learning and control; distributed and decentralized control; distributed intelligence; large-scale systems; multi-resolution modeling and control; cooperative control
- **Hybrid Intelligent Systems**
Hybrid dynamical systems control; logic control systems; pattern discovery
- **Learning and Adaptive Systems**
Adaptive control; machine learning; learning control systems; biologically-inspired learning
- **Multi-Sensor Integration and Fusion**
Smart sensors; knowledge-based sensor fusion
- **Networked Systems and Control**
Wireless ad hoc and sensor networks; distributed embedded systems; control of networked dynamic systems
- **Reconfigurable Systems**
Fault detection, identification, diagnosis, prognosis, and control
- **Soft Computing and Heuristics**
Artificial intelligence; expert systems; applications of computational intelligence methodologies

International Program Committees

CCA

Mohamed Abdelrahman, USA
Pedro Aguiar, Portugal
Frank Allgower, Germany
Erwei Bai, USA
Celeste M. Belcastro, USA
Christine M. Belcastro, USA
Raktim Bhattacharya, USA
Jozsef Bokor, Hungary
Francesco Borrelli, Italy
Martin W. Braun, USA
Sean Brennan, USA
Raymond de Callafon,
The Netherlands

Wen-Hua Chen, UK
Mihaela Cistelecan, Romania
Ian J. Fialho, USA
Yasumasa Fujisaki, Japan
Peter Gaspar, Hungary
Richard Hull, USA
Clas A. Jacobson, USA
Karl H. Johansson, Sweden
Tamas Kalmar-Nagy, USA
Mansour Karkoub, Arab Emirates
Tamas Keviczky, The Netherlands
Won-Jong Kim, USA
Kailash Krishnaswamy, USA

Alexander Lanzon, UK
Eicher Low, Singapore
Michael S. Lukich, USA
Lili Ma, USA
Andres Marcos, Spain
Marga Marcos, Spain
Charudatta Mehendale, USA
Bernard Mettler, USA
Selahattin Ozcelik, USA
John Reyland, USA
Scott Erwin Richard, USA
Daniel E. Rivera, USA
Sergio M. Savaresi, Italy

Thomas Schauer, Germany
Jacqueline Scherpen,
The Netherlands
Manuel de la Sen, Spain
Li Shihua, China
Carlos Silvestre, Portugal
Roy Smith, USA
Kamesh Subbarao, USA
Cornel Sultan, USA
Darbha Swaroop, USA
May-Win Thein, USA
Diana Yanakiev, USA

CACSD

Jean-Marc Biannic, France
Philippe Chevrel, France
Fabrizio Dabbene, Italy
Moritz Diehl, Belgium
Yoshio Ebihara, Japan

Peter Fritzson, Sweden
Antoine Girard, France
Didier Henrion, France
Daniel Kressner, Switzerland
Alberto Leva, Italy

William S. Levine, USA
Pieter J. Mosterman, USA
Brett Ninness, Australia
Toshiyuki Ohtsuka, Japan
Christian Schmidt, Germany

Vasile Sima, Romania
Antonis Vardoulakis, Greece
Herbert Werner, Germany

ISIC

Hyo-Sung Ahn, Korea
Sabri Arik, Turkey
Thomas Bak, Denmark
Laxmidhar Behera, India
Yang Quan Chen, USA
Xinkai Chen, Japan
Min-Sen Chiu, Singapore
Sesh Commuri, USA
Clarence de Silva, Canada
Mingcong Deng, Japan
Dimitri Driankov, Sweden

Hakan Duman, UK
Joo Er Meng, Singapore
Jay Farrell, USA
Rafael Fierro, USA
Huijun Gao, China
Naira Hovakimyan, USA
Fakhri Karray, Canada
Hak-Keung Lam, UK
Zongli Lin, USA
Yusuke Nojima, Japan
Wei Ren, USA

Samer Saab, Lebanon
Edgar Sanchez, Mexico
Jennie Si, USA
Fuchun Sun, China
Narasimhan Sundararajan,
Singapore
Ying Tan, Australia
Abdel Hamid Tayebi, Canada
Antonios Tsourdos, UK
Ganesh Venayagamoorthy, USA
Cong Wang, China

James Whidborne, UK
Donald Wunsch, USA
Yugeng Xi, China
Simon Yang, Canada
Milos Zefran, USA
Xiao Jun Zeng, UK
Guisheng Zhai, Japan
Yunong Zhang, China
Wei Xing Zheng, Australia