



Intelligent Systems For Man In A Cyberworld

In cooperation with: World Automation Congress, North American Fuzzy Information Processing Society, the IEEE TAB Intelligent Transportation Systems Ad Hoc Committee, and the Institute for Operations Research and Management Sciences

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Theme

This year's conference theme, Intelligent Systems for Man in a Cyberworld, has been selected to emphasize the growing importance of computational methods and modeling tools in the design, analysis and control of intelligent and information systems. Presentations dealing with theoretical perspectives, new computational tools, new paradigms in design and analysis, and innovative modeling applications are encouraged. Tutorials, plenary presentations, and technical sessions will emphasize the conference theme. Special sessions on comparison of different solution methodologies to problems of interest are highly encouraged. *Professor Lotfi Zadeh will chair a panel discussion on "New Frontiers in Information/Intelligent Systems."* *Plenary Speakers are Professor P. Varaiya from UC Berkeley, Professor M. Silva from University of Zaragoza, Spain and William B. Rouse, CEO, Enterprise Support Systems.*

Location

The conference will be held October 11-14, 1998 at the Hyatt Regency La Jolla in San Diego, California. Located near San Diego's scenic northern shores, a few miles from La Jolla downtown, and only twenty minutes from the San Diego International airport, the Hyatt provides easy access to many tourist attractions of San Diego county, including Sea World, the San Diego Zoo, San Diego Wild Animal Park, and Anza-Borrego Desert State Park. The spectacular shorelines, Pacific beaches of La Jolla, and many of the San Diego's best golf courses are only a few minutes away from the hotel. The Aventine, which includes Hyatt, also houses five internationally themed restaurants, a sporting club, a spa, a sauna, and a business center. The Hyatt has swimming pools, and racquetball, tennis and squash courts. The room rate is \$126.00 per night, single or double occupancy.

Important Dates

February 15, 1998 (Firm) Deadline for three copies of contributed paper abstract (with topic area designations).
March 15, 1998 (Firm) Deadline for three copies of invited section/track proposal (with topic area designations).
April 15, 1998 (Firm) Acceptance/rejection notification of contributed paper abstracts and invited section/track proposals.
June 15, 1998 (Firm) Deadline for final "camera-ready" paper and author pre-registration.

Call for Contributed Papers

The Technical Programs Committee solicits papers for presentation at the conference. All papers will be reviewed by up to three referees for technical merit and content on the basis of an abstract of no more than 300 words. Papers accepted for presentation will appear in the *Conference Proceedings*. All abstracts must have a cover page containing the title of the paper along with the names, affiliations, and complete mailing (including electronic mailing) addresses of all authors, as well as a rank-ordered list of the three designated topic areas most closely related to the paper. The cover sheet should list the four-digit number along with the name of each of the three designated topic areas. All correspondence will be directed to the first named author unless indicated otherwise. We regret that e-mail abstracts of paper submissions cannot be accepted. Six pages will be allocated in the *Proceedings* for each paper. Papers which exceed this length will be charged on a per page basis. Each paper presentation should be approximately 20 minutes.

Call for Invited Sessions and Tracks

Invited sessions (each comprised of 3-5 papers) and invited tracks (each comprised of at least two sessions), are solicited in all topic areas. Survey papers and/or case studies could also form the basis of invited sessions. Each prospective section/track organizer must submit a proposal, including the title of the session/track, a rank-ordered list of the three topic areas most closely related to the session/track, and a list of authors with paper titles and abstracts.

(OVER)

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Zha, H.-B. (Japan)
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Call for Conference Tutorials

The Technical Arrangements Committee solicits proposals for half-day tutorials or workshops, which are related to the conference theme. An honorarium will be provided for each tutorial based on the number of registered attendees.

Designated Topic Areas

The designated areas under the main topics include both the theory and applications. Four digit codes will be used to identify the complete designated area for the paper: The first two digits refer to designated topic area (e.g., 11 for Petri Nets) and the last two digits identify the application area (e.g., A1 for Manufacturing Systems). Please make sure that you provide us with three options each with four-digit codes.

1 Systems Modeling and Control

- 11 Petri Nets - Theory and Applications
- 12 Discrete Event Dynamic Systems
- 13 Hybrid Systems
- 14 Neural Networks and Classical Control
- 15 Fuzzy Logic Control
- 16 Robot Dynamics and Control
- 17 Nonlinear Systems and Control
- 18 Adaptive Control

2 Computational Cybernetics

- 21 Pattern Recognition and Classification
- 22 Image Processing and Machine Vision
- 23 Optimization Techniques
- 24 Planning and Scheduling Techniques
- 25 Neural Networks
- 26 Genetic Algorithms
- 27 Bio-cybernetics
- 28 Data Mining and Knowledge Discovery
- 29 Soft Computing

3 Human and Machine Systems

- 31 Command and Control Systems
- 32 Human Computer Interaction and Virtual Reality
- 33 Human Factors in System Design
- 34 Virtual Reality and Systems Design
- 35 Machine Learning
- 36 Adaptive and Learning Systems
- 37 Multimedia

4 Decision Support Systems

- 41 Cognitive Systems and Engineering
- 42 Expert and Knowledge Systems
- 43 Management Information Systems
- 44 Data Base and Software Engineering
- 44 Simulation Methodology and Output Analysis
- 45 Simulation languages
- 46 Financial Engineering

5 Quality/Reliability and Systems Engineering

- 51 System Design and Reliability/Quality Engineering
- 52 System Design and Validation/Verification Techniques
- 53 System design and Product/Service Quality
- 54 Process Monitoring and Closed Loop Feedback Systems

A. Application Areas

The two-digit codes here must be used together with the designated area codes.

- A0 Generic Solutions with no emphasis on applications
- A1 Manufacturing Systems
- A2 Intelligent Transportation Systems
- A3 Communication Networks and Protocols
- A4 Medical and Health Care Systems
- A5 Military Systems
- A6 Service and Public Sector Systems
- A7 Energy and Environment Systems
- A8 Others

Touring and Recreational Activities

In conjunction with the conference, a variety of special family events will be offered in and around the San Diego area. These will include visits to the various tourist attractions. There will be an around the clock shuttle between the Hyatt and the La Jolla downtown and the La Jolla beaches.

Student Activities

Many student activities will be offered at SMC '98. The SMC Student Activities Web Site (www.isye.gatech.edu/chmsr/smc-students) provides complete details of student activities.

Student Paper Competition: An award will be given for the best student paper. To be considered, the lead author must be the major contributor to both the written paper and to the research described. In addition, the lead author must have been a student at the time the described research was completed. **Please indicate if the paper will be registered as a student paper.**

Student Poster Competition: An award will be given for the best student poster exhibited. Posters should consist of up to eight letter or A4 -sized sheets. Students should submit three copies of their poster materials by **August 1, 1998**. Instructions on where and when to send the poster materials will be posted on the student activities web site.

Student Volunteers: Student volunteers will be an active part of SMC '98. Up to 25 student volunteers will be used to coordinate paper sessions, assist with registration, support audio/visual equipment, run errands, etc. Further information regarding student volunteering is provided on the student activities web site.

Web Site: <http://www.engr.rutgers.edu/~smc98>

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Letter of Intent: Please use a separate form for each tutorial/workshop, track, session or paper. These forms can be submitted via Internet using the conference website.

If your article emphasizes a solution methodology to a specific problem and you would like to be in a session focusing on the comparison of different solution methodologies to that problem, please check this box.

I (we) propose to conduct a half-day tutorial or workshop on:

I (we) would like to organize a track of _____ sessions on:

I (we) propose to organize a session of _____ papers on:

I am (we are) intending to submit a paper on:

Title: _____

Related Topic/Application Areas 1. No.: |_|_|_| |_|_|_| Topic: _____

2. No.: |_|_|_| |_|_|_| Topic: _____

3. No.: |_|_|_| |_|_|_| Topic: _____

Name: _____

Address: _____

City: _____ State/Prov.: _____ Postal/Zip Code: _____

Country: _____ Phone: _____ Fax: _____ E-mail: _____