

- \* Denotes a CIS-sponsored conference
- Δ Denotes a CIS Technical Co-Sponsored Conferences

**Δ Learning and Intelligent Optimization Conference**

January 14–18, 2009; Trento, Italy  
<http://intelligent-optimization.org/LION3>  
General Chair: Bart Selman

**\* 2009 IEEE Symposium Series on Computational Intelligence (SSCI 2009)**

March 30–April 2, 2009; Nashville, Tennessee, USA

[www.ieee-ssci.org](http://www.ieee-ssci.org)  
General Chair: Vincenzo Piuri  
Deadline for Paper Submission: November 12, 2008

**\* 2009 IEEE Congress on Evolutionary Computation (CEC 2009)**

May 18–21, 2009; Trondheim, Norway  
[www.cec-2009.org](http://www.cec-2009.org)  
General Chair: Andy Tyrrell  
Deadline for Paper Submissions: November 14, 2008

**Δ 2009 International Joint Conference on Neural Networks (IJCNN 2009)**

June 14–19, 2009; Atlanta, Georgia, USA  
[www.ijcnn2009.com](http://www.ijcnn2009.com)  
General Chair: Robert Kozma

**\* 2009 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2009)**

August 20–24, 2009, Jeju, Korea  
[www.fuzz-ieee2009.org](http://www.fuzz-ieee2009.org)  
General Co-Chairs: Kyung Chang and HongTae Jeon  
Deadline for Paper Submissions: February 1, 2008

## IEEE Symposium Series on Computational Intelligence



**IEEE SSCI 2009 March 30 – April 2, 2009 Sheraton Music City Hotel, Nashville, TN, USA**  
**<http://www.ieee-ssci.org> Paper Submission Due: October 31, 2008**

and exhibitions is highly appreciated. IJCNN has been supported by the skillful professional help of Rees Group Management Services. I have to mention the outstanding initiative by Jennie Si in her role as IEEE CIS VP for Education, together with Dianne Delp, CIS Multimedia Tutorials Chair for Educational Activities, who organized the video recording of presentations at tutorials, plenary and other key talks at IJCNN2009. These materials are available online at the web site <http://ewh.ieee.org/cmte/cis/mtsc/ieeecis/>



IJCNN featured a special event: The 50th year of LSM algorithm, invented by Bernie Widrow and Ted Hoff.

plenary\_talks.htm, which certainly will greatly facilitate the development of our field and the proliferation of neuromorphic technologies.

It has been a great experience for me to be able to work together with such a highly qualified and devoted team thorough the organization of IJCNN2009. Thank you all who involved in this event and provided the support to this great accomplishment. We made an important step forward in developing our research field. I wish a lot of successes for all in the challenges ahead!



## 2009 IEEE Symposium Series on Computational Intelligence (SSCI 2009)

Vincenzo Piuri  
*Università degli Studi di Milano, ITALY*

The 2009 IEEE Symposium Series on Computational Intelligence (SSCI 2009), sponsored by the IEEE Computational Intelligence Society, was held on March 30–April 2, 2009, in Nashville, Tennessee, USA, at the Sheraton Music City Hotel. This was the second edition of a multi-faceted, attractive conference, which followed the stimulating experience of Honolulu, Hawaii, USA, in 2007. The goal was to create a unique, interdisciplinary forum promoting dissemination and understanding of various emerging computational intelligence technologies and many specific applications. While the World Congress on Computational Intelligence is used to focus on the three major technological areas of computational intelligence (namely, neural networks, fuzzy systems, and evolutionary computing) and their applications, the Symposium Series on Computational Intelligence focused on other theoretical aspects which did not had yet the same resonance in the international scientific and professional com-



Every day lunch for all attendees was a great opportunity to see old friends and make new ones. Students were able to get in touch with senior researchers and professionals from industry in a relaxed environment.

munity. On the other side, the Symposium Series aimed to give more visibility to focused application areas for the benefit of researchers and professionals and for making them specific comprehensive forums for the international community. This structure gave the opportunity to small meetings and emerging areas to achieve visibility and become attractive to the whole computational intelligence community as well as to communities interested in the specific envisioned applications.

In the 2009 edition of the Symposium Series on Computational Intelligence we brought together, under the same roof, 21 specialty meetings: IEEE Symposium on Adaptive Dynamic Programming and Reinforcement Learning (ADPRL 2009), IEEE Symposium on Computational Intelligence in Control and Automation (CICA 2009), IEEE Workshop on Robotic Intelligence in Informationally Structured Space (RiSS 2009), IEEE Workshop on Evolving and Self-Developing Intelligent Systems

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(ESDIS 2009), IEEE Workshop on Evolvable and Adaptive Hardware (WEAH 2009), IEEE Swarm Intelligence Symposium (SIS 2009), IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB 2009), IEEE Symposium on Artificial Life (ALIFE 2009), IEEE Symposium on Computational Intelligence in Multi-Criteria Decision-Making (MCDM 2009), IEEE Symposium on Computational Intelligence in Scheduling (CI-Sched 2009), IEEE Symposium on Computational Intelligence and Data Mining (CIDM 2009), IEEE Workshop on Hybrid Intelligent Models and Applications (HIMA 2009), IEEE Symposium on Intelligent Agents (IA 2009), IEEE Symposium on Computational Intelligence in Cyber Security (CICS 2009), IEEE Symposium on Computational Intelligence in Vehicles and Vehicular Systems (CIVVS 2009), IEEE Symposium on Computational Intelligence for Multimedia Signal and Vision Processing (CIMSVP 2009), IEEE Symposium on Computational Intelligence for Image Processing (CIIP 2009), IEEE Workshop on Computational Intelligence in Virtual Environments (CIVE 2009), IEEE Workshop on Computational Intelligence for Visual Intelligence (CIVI 2009), IEEE Workshop on Computational Intelligence in Biometrics: Theory, Algorithms, and Applications (CIB 2009), and IEEE Symposium on Computational Intelligence for Financial Engineering (CIFER 2009). The World Congress and the Symposium Series complement therefore each other nicely.

The meeting featured 10 keynote lectures, 13 tutorials, 8 panels, and many sessions for technical papers. The technical quality of the conference was good, stimulating and attractive: 452 papers have been accepted out of 637 which have



Panelists from NIH and NSF including Fahmida Chowdury (right) answer questions about cyberinfrastructure in biomedicine.

been submitted. The technical program was structured to allow each attendee for always finding something of interest to him within the melting pot of the conference, which was four full days long. The specialized meetings—encompassing their keynote lectures, tutorials, technical papers, and panels—were arranged in nine parallel tracks focusing on technologies or application areas. To allow for interdisciplinary breeding, keynotes, tutorials and panels have been arranged for maximizing the opportunity of attending these top-quality events by distributing them along the whole conference. One registration fee allowed for attending all technical meetings, thus strongly promoting broad knowledge dissemination and stimulating cross-disciplinary views. Such arrangement was very appreciated by the attendees who were able to benefiting from the exposure to diversity of ideas and cultural backgrounds. Besides, wide dissemination and cross-fertilization of ideas was promoted also by the CD proceedings which include papers of all conferences held within SSCI 2009, thus ensuring a broad exposure of technologies and applications. Proceedings were also included in the IEEE *Xplore* platform.

The availability of a wide common area in the middle of the conference center, furnished with table and seats, and with plenty of refreshments, was very effective to support people net-

working all days along. Lunches and the banquet were served to all attendees, including students, so as to create a friendly and convivial setting to facilitate personal communication and networking. Many attendees were truly impressed and happy about this environment.

Despite the economical situation which hit the conference at the time of the paper submission, the meeting attracted a lot of interest, especially being only at the second edition.

Over 500 top researchers, professionals, and students from around the world congregated for the meeting, exploited the various opportunities and greatly contributed to the advancement of science, technology, and professional practice for the benefit of the economy, the social promotion, and the humanity.

Attendees were also very attracted by the magical town of Nashville, world capital of country music, but also to several rap artists and rock bands. Good food, excellent music, unique entertainments, and stimulating atmosphere make Nashville a unique experience. A taste of all of this made Nashville a valuable memory for each attendee.

SSCI 2009 would not have achieved such a success without the coordinated efforts of many dedicated volunteers, encompassing the SSCI organizing committee as well as the program chairs and the program committee members of each technical meeting. Thank you to each and every one of them for the precious contribution!

I hope that SSCI 2009 was a memorable experience for all attendees and organizers and I wish that we could meet again at the next edition! I am sure that the successful series will continue with another great meeting at another enchanting venue.







## CALL FOR PAPERS

This international event promotes all aspects of the theory and applications of Computational Intelligence. With its hosting of over thirty technical meetings in one location, it is bound to attract lead researchers, professionals and students from around the world. Sponsored by the IEEE Computational Intelligence Society, the 2011 edition follows in the footsteps of the SSCI 2007 meetings held in Honolulu and of the SSCI 2009 series held in Nashville. The event will take place in the magic town of Paris.

### IMPORTANT DATES

Paper Submission Due: October 31, 2010  
Notification to Authors: December 15, 2010  
Camera-Ready Papers Due: January 15, 2011

Please visit [www.ieee-ssci.org](http://www.ieee-ssci.org)

or contact [ssci2011@poleia.lip6.fr](mailto:ssci2011@poleia.lip6.fr) for submission information and additional details

Computational Intelligence (CI) evolves computational models and tools of intelligence capable of handling large raw numerical sensory data directly, processing them by exploiting the representational parallelism and pipelining the problem, generating reliable and just-in-time responses, and having high fault tolerance. Smart grid is basically the embedding of intelligence to enable bidirectional power flows with traditional sources of power generation, renewable sources and energy storage. CI deployment is essential in smart grid to make it a success. Research and deployment of smart grid technologies are being promoted by governments of many countries as a way of addressing energy independence, emission reductions, and bringing resilience to electricity infrastructures. The Symposium on CI Applications in Smart Grid (CIASG) aims at bringing researchers and engineers from academia and industry together to present, interact and review the latest progresses in this emerging field, and to explore future research directions to address its challenges.

**TOPICS COVERED:** CIASG invites authors to submit their original and unpublished work in the applications of CI to Smart Grid, including the following, but not limited to:

- Algorithms for modeling, control and optimization
- Communication and control
- Cyber security
- Demand side management
- Distributed energy resources
- Dynamic equivalents
- Emissions
- FACTS
- Markets and economics
- Methods and algorithms for real-time analysis
- Optimization
- Planning, operation and control
- Plug-in vehicles
- Renewable energy
- Smart micro-grids
- Smart grid education
- Smart sensing
- Synchronphasors
- Wide area monitoring, control and protection
- Visualizations for control centers

### CIASG Chair

Dr. Ganesh Kumar Venayagamoorthy  
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Marios Polycarpou, University of Cyprus, Cyprus  
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Adrien Revault d'Allonnes, LIP6, Université Pierre et Marie Curie, Paris, France

# 2009 IEEE Symposium on Computational Intelligence in Scheduling (CI-Sched 2009)

<http://www.ieee-ssci.org/index.php?q=node/13>

March 30 – April 2, 2009

Sheraton Music City Hotel, Nashville, TN, USA



## Symposium Chairs

Rong Qu, Kay Chen Tan,  
Michel Gendreau

## Program committee

Hussein Abbass, Samad Ahmadi, Uwe Aickelin, Masri Ayob, Ruibin Bai, Pedro Ballester, Edmund Burke, Yuri Bykov, Peter Brucker, Tsung-Che Chiang, Raymond Chiong, Vincent Cicirello, Patrick De Causmaecker, Dominique De Werra, Kathryn Dowland, Hai-Bin Duan, Wilhelm Erben, Jacques Ferland, Xinbo Gao, Jon Garibaldi, Michel Gendreau, Chi Keong Goh, Steven Gustafson, Licheng Jiao, Nicolas Kemper, Graham Kendall, Natalio Krasnogor, Raymond Kwan, Sam Kwong, Dario Landa-Silva, Jiawei Li, Jingpeng Li, Richard Lee, Dikai Liu, Jiyin Liu, Ana Madureira, Amnon Meisels, Nysret Musliu, Ender Ozcan, Garbiela Ochoa, Sanja Petrovic, Rong Qu, Celso Ribeiro, Hana Rudova, Andrea Schaerf, Yindong Shen, Kay Chen Tan, Jonathan Thompson, Micheal Trick, Edward Tsang, Greet Vanden Berghe, Mario Vanhoucke, Jean-Paul Watson, John Woodward, Mike Wright, Justin Zhan, Zhili Zhou, Yakov Zinder

## CALL FOR PAPERS

CI-Sched 2009 covers research on all aspects of computational intelligence applied to scheduling. Due to the huge search spaces that have to be explored, scheduling problems cannot usually be solved by exact approaches. Therefore we often have to turn to techniques in Computational Intelligence (including evolutionary computation, memetic algorithms, neural networks, swarm intelligence, fuzzy logic, etc.) This symposium aims to explore recent advances in this area.

Topics include, but are not limited to, the following:

- Computational Intelligence in:
  - Course and Examination Timetabling
  - Commercial Scheduling packages
  - Employee Scheduling
  - Production Scheduling
  - Sports Scheduling
  - Transport Scheduling
- Complexity Issues in scheduling
- Interactive Scheduling using Computational Intelligence
- Comparison of Techniques (e.g. compare Neural Networks with Fuzzy Logic or comparison of a meta-heuristic approach with a CI approach)
- Experiences of CI within Scheduling
- Case Studies
- Theoretical or empirical analysis of evolutionary algorithms and representations for scheduling

Prospective authors are invited to prepare papers of no more than eight (8) pages in IEEE double-column conference style, including results, figures and references. Submissions are to be made via <http://www.ieee-cis.org/conferences/cisched2009/upload.php>, More submission information is at <http://www.ieee-ssci.org/index.php?q=node/36>.

**Authors of papers related to memetic algorithms are invited to submit extended versions of their papers to a special issue of the Journal of Memetic Computing.**

## Important Dates

Submission Deadline: **November 12, 2008**  
Notification to Authors: November 30, 2008  
Camera-Ready Due: January 15, 2009

