

# CIRA 2009



2009 IEEE International Symposium on  
Computational Intelligence in Robotics and Automation

December 15-18, 2009  
Daejeon, Korea

Sponsored by  
the IEEE Robotics and Automation Society

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## Call for Papers

The 8th IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA2009) provides an opportunity for prominent researchers, engineers and practitioners to present the latest research results, innovations, and potential future directions in computational intelligence in robotics and automation.

Ubiquitous computing has motivated a paradigm shift in robotics, which has commenced the new multidisciplinary research areas such as ubiquitous robotics and genetic robotics, initiating the next generation of robotics, following the first generation of industrial robotics and the second generation of personal robotics. Special emphasis will be placed on the usage of computational intelligence technologies to realize cognitive intelligence, social intelligence, behavioral intelligence, ambient intelligence and genetic intelligence for the next generation robots and also to implement intelligent knowledge service systems, medical systems, health care systems, manufacturing systems and automation systems. The Symposium covers the following topics, but is not limited to these:

- Evolutionary computation
- Fuzzy logic
- Neural networks
- Machine learning
- Sensor fusion
- Computer vision
- Voice recognition
- Agent technology
- Cognitive intelligence
- Social intelligence
- Behavioral intelligence
- Ambient intelligence
- Genetic intelligence
- Swarm intelligence
- Intelligent systems
- Adaptive and learning system
- Knowledge service system
- Personal robotics
- Ubiquitous robotics
- Genetic robotics
- Biologically inspired robotics
- Evolutionary robotics
- Modular robotics
- Multi co-operative robotics
- Cyber-physical system robotics
- Health-care robotics
- Complex behaviors

### Electronic Paper Submission

Papers are invited on all aspects of computational intelligence in robotics and automation. Six pages are allowed for each paper. Up to four additional pages will be permitted with extra charge. Full-length papers in standard IEEE format must be submitted electronically in either the PS (PostScript) or PDF (Portable Document Format) file format as per the electronic submission instructions published on the CIRA2009 website.

### Special Session, Tutorial and Workshop Proposals

Proposals for special sessions consisting of four papers and for half and full day tutorials and workshops are welcome. Proposals should include a statement of purposes and a summary with a list of speakers and their topics with abstracts. Further information will be posted on the CIRA2009 website.

### Location

The CIRA2009 will be held at DCC (Daejeon Convention Center) where is the optimal venue to support all kinds of meetings and convention activities. Several major science facilities such as Daedeok Valley, EXPO Park are adjacent to the DCC. Daejeon, where longstanding tradition and future science co-exist, was reborn as a convention city of new concept. It is a clean and modern city with excellent transportation system, state-of-the-art convention facilities, various tourist attractions and accommodations. The biggest strength of Daejeon as a MICE site is that it is the hub of Korea's science and technology industries.

### Important Dates

Deadline for proposals for special sessions  
Deadline for submission of full-length papers  
Deadline for submission of special session papers  
Deadline for proposals for tutorials and workshops  
Notification of acceptance  
Deadline for submission of final papers

April 15, 2009  
July 31, 2009  
July 31, 2009  
July 31, 2009  
September 30, 2009  
October 31, 2009

### Related events

ITHET2009 December 16<sup>th</sup> ~ 18<sup>th</sup>  
International Robot Olympiad 2009 Korea December 17<sup>th</sup> ~ 20<sup>th</sup>  
1st International Education Robot Fair 2009 December 17<sup>th</sup> ~ 20<sup>th</sup>

<http://www.cira2009.org>

