

# The 12th IEEE International Conference on Computational Science and Engineering (CSE-09)



<http://cse.stfx.ca/~cse09/>

Organized by St Francis Xavier University, Canada

Sponsored by IEEE, IEEE CS and IEEE TCSC

Vancouver, Canada, August 29-31, 2009



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See CSE-09 web site: <http://cse.stfx.ca/~cse09/>

Further questions, please contact with  
[cse09@googlegroups.com](mailto:cse09@googlegroups.com)

## INTRODUCTION

The Computational Science and Engineering area has earned prominence through advances in electronic and integrated technologies beginning in the 1940s. Current times are very exciting and the years to come will witness a proliferation in the use of various advanced computing systems. It is increasingly becoming an emerging and promising discipline in shaping future research and development activities in academia and industry, ranging from engineering, science, finance, economics, arts and humanitarian fields, especially when the solution of large and complex problems must cope with tight timing schedules.

CSE-09 is the next event, in a series of highly successful International Conferences on Computational Science and Engineering (CSE-09), held mainly as the International Workshop on High Performance Scientific and Engineering Computing for 10 editions, mostly in conjunction with International Conference on Parallel Processing (ICPP), as COATA-98 (Orlando, USA, July 1998), HPSEC-99 (Fukushima, Japan, September 1999), HPSEC-00 (Toronto, Canada, August 2000), HPSEC-01 (Valencia, Spain, September 2001), HPSEC-02 (Vancouver, Canada, August 2002), HPSEC-03 (Kaohsiung, Taiwan, October 2003), HPSEC-04 (Montreal, Canada, August 2004), HPCSE-04 with WCC-04 (Toulouse, France, August 2004), HPSEC-05 (Oslo, Norway, June 2005), and HPSEC-06 (Columbus, USA, August 2006). The previous CSE-08 was held in São Paulo, Brazil, July 16-18, 2008.

## SCOPE AND INTERESTS

CSE-09 is to bring together computer scientists, applied mathematicians, engineers in different disciplines and researchers to present, discuss and exchange ideas, results and experiences in the area of advanced computing for problems in science and engineering applications and inter-disciplinary applications. Topics of particular interest include, but are not limited to:

- Intelligent and Bio-inspired Computing
- Database and Data Mining
- Mobile Computing and Wireless Communications
- Scientific and Engineering Computing
- Advanced Networking and Applications
- Web Services and Internet Computing
- CSE applications to the following areas, but not limited to:
  - computational fluid dynamics and mechanics; material sciences; computational chemistry; space, weather, climate systems and global changes; computational environment and energy systems; computational ocean and earth sciences; combustion system simulation; computational physics; bioinformatics and computational biology; medical applications; transportation systems simulations; combinatorial and global optimization problems; structural engineering; computational electro-magnetic; computer graphics and multimedia; semiconductor technology and electronic circuits and system design; dynamic systems; computational finance; data mining; signal and image processing, etc
- Distributed and Parallel Computing
- Cluster, Grid and P2P Computing
- CSE Education
- Embedded and Ubiquitous Computing
- Security, Privacy and Trust
- Dependable, Reliable and Autonomic Computing

## IMPORTANT DATES

<b>Workshop Proposal:</b>	<b>March 15, 2009</b>
<b>Submission Deadline:</b>	<b>April 15, 2009</b>
<b>Authors Notification:</b>	<b>May 25, 2009</b>
<b>Final Manuscript Due:</b>	<b>June 15, 2009</b>

## ELECTRONIC SUBMISSION

Prepare your paper with free styles not more than 15 pages in PDF file. Submit your paper(s) at the CSE-09 submission site: <http://cse.stfx.ca/~cse09/sub/>  
Each submission should be regarded as an undertaking that, if the paper is accepted, at least one of the authors must attend the conference to present the work in order for the paper to be included in the IEEE Digital Library.

## PAPER PUBLICATIONS

Accepted papers will be published in proceedings of the CSE-09 conference by IEEE Computer Society. Selected bested papers will be recommended for publication in special issues of Journal of Supercomputing, International Journal of high Performance Computing and Networking (IJHPCN), and International Journal of Computational Science and Engineering (IJCSE) and several SCI-indexed journals.

## WORKSHOP PROPOSAL

In conjunction with the CSE-09 conference, several workshops will be held. Please submit a workshop proposal including call for papers, organizing committee, important dates, short bio of the organizers to the CSE-09 workshop chairs before March 01, 2009. Proceedings of CSE-09 workshops will be published by IEEE CS Press. The workshops with more than 15 papers will be granted with a free complimentary registration for the leading workshop organizer.