

The 13th IEEE International Conference on Computational Science and Engineering (CSE-2010)

<http://cse.stfx.ca/~cse2010/>



Sponsored by IEEE, IEEE CS and IEEE TCSC
Hong Kong, China, December 11-13, 2010



Honorary Chairs

Jon C. Muzio, University of Victoria, Canada
Richard P. Brent, Australian National Univ., Australia

General Chairs

Jiannong Cao, Hong Kong Polytechnic University, China
Eric de Sturler, Virginia Tech, USA
Sotirios G. Ziavras, New Jersey Institute of Technology, USA

Program Chairs

Hai Jiang, Arkansas State University, USA
Luc Giraud, INRIA, France
Yunquan Zhang, Chinese Academy of Sciences, China

Program Vice-Chairs

Intelligent and Bio-inspired Computing
Nik Bourbakis, Wright State University, USA

Distributed and Parallel Computing
Chao-Tung Yang, Tunghai University, Taiwan

Database and Data Mining
Alfredo Cuzzocrea, ICAR and University of Calabria, Italy

Cluster, Grid, P2P and Cloud Computing
Daniel Grosu, Wayne State University, USA

Service and Internet Computing
Jian Wu, Zhejiang University, China

Mobile Computing and Wireless Communications
Tao Jiang, Huazhong Univ. of Science & Technology, China

CSE Applications
Hsi-Ya Chang, National Center for HPC, Taiwan

Scientific and Engineering Computing
Nectarios Koziris, Natl. Technical Univ. of Athens, Greece

Embedded and Ubiquitous Computing
Wen-Jyi Hwang, National Taiwan Normal University, Taiwan

Advanced Networking and Applications
Honggang Wang, Univ. of Massachusetts Dartmouth, USA

Security, Privacy and Trust
Chin-Feng Lee, Chaoyang University of Technology, Taiwan

Dependable, Reliable and Autonomic Computing
Vincenzo De Florio, University of Antwerp, Belgium

CSE Education
Qing Tan, Athabasca University, Canada

Workshop Chairs

Ligang He, University of Warwick, UK
Kuan-Chou Lai, National Taichung University, Taiwan

Steering Committee

Laurence T. Yang (chair), St Francis Xavier Univ., Canada
Hai-xiang Lin, Delft University of Technology, Netherlands
Kuan-Ching Li, Providence University, Taiwan
Rodrigo F. de Mello, ICMC, University of São Paulo, Brazil

Panel Chair

Yeh-Ching Chung, National Tsing Hua University, Taiwan

Local Chair

Alvin Chan, Hong Kong Polytechnic University, China

Web and Submission Chair

Yuchen Ye, St Francis Xavier University, Canada

Program Committee

See CSE-2010 web site:
<http://cse.stfx.ca/~cse2010/>

Further questions, please contact with
cse10@googlegroups.com

INTRODUCTION

The field of Computational Science and Engineering 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. This emerging and promising discipline is increasingly shaping future research and development activities in academia and industry, ranging from engineering, science, finance, economics, to arts and human science, especially when the large and complex problems must be solved within a tight schedule.

CSE-2010 is the next event in a series of highly successful International Conferences on Computational Science and Engineering, 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 and CSE-09 were held in São Paulo, Brazil, July 16-18, 2008 and Vancouver, Canada, August 29-31, 2009.

SCOPE AND INTERESTS

CSE-2010 aims to bring together computer scientists, applied mathematicians, engineers in a range of 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
- Service 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, P2P and Cloud Computing
- CSE Education
- Embedded and Ubiquitous Computing
- Security, Privacy and Trust
- Dependable, Reliable and Autonomic Computing

IMPORTANT DATES

Workshop Proposal:	Ongoing as received
Submission Deadline:	Sep. 15, 2010
Authors Notification:	Oct. 15, 2010
Final Manuscript Due:	Oct. 30, 2010

ELECTRONIC SUBMISSION

Prepare your paper with free styles not more than 15 pages in PDF file. Submit your paper(s) at the CSE-2010 submission site: <http://cse.stfx.ca/~cse2010/sub/>
Each submission should be assumed 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-2010 conference by IEEE Computer Society. Selected papers will be recommended for publication in special issues of the Springer's Journal of Supercomputing, the Elsevier's Future Generation Computer Systems (pending) and the Wiley's Concurrency and Computation (pending).

WORKSHOPS

In conjunction with the CSE-2010 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-2010 workshop chairs. Proceedings of CSE-2010 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.