

# IEEE Congress on Evolutionary Computation

May 18 – 21, 2009, Trondheim, Norway

Photo: Jørn Adde © Trondheim kommune

Photo: Jørn Adde © Trondheim kommune

## Call for Papers

### Special Session on

### **PERPLEXUS: Pervasive reconfigurable platform for modelling complex systems.**

#### Special Session

#### Organizers:

Andres Upegui  
HEIG-VD  
Switzerland  
andres dot upegui at heig-vd.ch

Andres Perez-Uribe  
HEIG-VD  
Switzerland  
andres dot perez-uribe at heig-  
vd.ch

#### Scientific Program Committee

to be posted

#### Motivation and Scope:

The simulation of large-scale complex systems requires huge amounts of computing resources. Even if the Moore law yet guarantees increasingly more powerful chips every year, the capacity of a single device is not always able to provide the optimal solution for running this kind of application. A new kind of distributed computing could appear in the near future, with the advent of a new era of computing, after the mainframe era, and the PC era. In this 3<sup>rd</sup> era of computing, we are likely to see a myriad of ubiquitous devices with large computing and sensory capacities in our environment.

Anticipating this new era of computing, we can imagine a solution for simulating complex systems, using the computational resources of ubiquitous devices in our environment. These devices will be adaptable and retargetable, for this, they will be made of custom reconfigurable devices endowed with adaptation capabilities that will enable the simulation of large-scale complex systems and the study of emergent complex behaviors in virtually unbounded wireless networks of computing modules.

#### Topics:

The aim of this special session is to bring together hardware, middleware, and application developers of systems that exploit the pervasiveness of ubiquitous systems in order to model complex systems. This session will allow researchers to share experiences and identify theoretical and technical issues. Submitted papers may describe applications, computing models, modeling frameworks, or hardware platforms.

#### Submission Guidelines:

Manuscripts should be prepared according to the standard format of regular papers specified in IEEE CEC 2009. Paper submission is online through the CEC 2009 submission website <http://www.cec-2009.org/index.shtml>. Papers submitted for special sessions are to be peer-reviewed with the same criteria used for the regular conference papers.

#### Important Dates:

Paper submissions	November 1, 2008
Notification of acceptance	January 16, 2009
Final paper submission	February 16, 2009



Information Society  
Technologies