Call for Papers Workshop on Software Engineering for Large Scale Computing, SELSC'08

http://www.cc.uah.es/drg/selsc08

Motivation

Computational Science techniques are increasingly being applied in both research institutions and industry to for example, financial applications, bioinformatics applications, physical applications, data mining applications based on grid or clusters etc. As with other disciplines there are specific issues when planning and developing such applications. For example, those applications are generally distributed and based upon Grid environments or clusters with specific management and planning issues, design, testing, etc. This workshop would like analyse to software engineering issues specific to these types of applications such as adaptation of processes for, planning, management, verification and validation, testing, quality measurement, etc. Also, there is also a motivation for further research on the other direction, i.e., the application of computational intelligence techniques to software engineering issues as a result of the creation of large metrics databases collected from software projects. Examples of computational techniques applied to Software Engineering include genetic algorithms, Bayesian networks, system dynamics, visualization, search based software engineering etc. Many emergent issues are subject to research efforts combining both computational techniques and Software Engineering.

Topics of interest

Topics of interest include, but are not limited to the following areas:

- Software processes for computational science applications
- Analysis and development of computational applications
- Testing of computational applications
- Computational intelligence techniques applied to software engineering
- Mining software engineering repositories
- Management issues for handling large amount of data
- Execution of data mining algorithms on grid and cluster environments
- Etc.

Objectives

- To bring together researchers and practitioners from computational science and software engineers backgrounds
- To steer discussion and debate on various aspects and issues related to software engineering processes when applied to computational problems
- How to apply software engineering techniques to computational intelligence problems
- To open research directions that are deemed essential by the researchers in the field and industry

Important dates

Full papers submission

Notification of acceptance of papers

Camera ready papers

Early registration

Early registration closes

January 31, 2008

March 1, 2008

March 1, 2008

March 1, 2008

March 30, 2008

Publication

Accepted papers will be published as part of the ICCS (International Conference on Computational Science) conference by Springer as Lecture Notes in Computer Science (LNCS) volume.