CALL FOR PAPERS
2013 International Workshop on Software Engineering for Computational Science and Engineering
Workshop in Conjunction with ICSE 2013 – San Francisco - Saturday, May 18, 2013
http://www.cs.ua.edu/~SECSE13/ICSE/

This workshop is concerned with identifying and understanding the unique aspects of software development for Computational Science & Engineering (CSE) applications. Software development for the increasing important CSE domain has not received enough attention from the Software Engineering (SE) community. Specifically, we are focused on:

- Scientific or engineering software applications, where the focus is on directly solving scientific or engineering problems. These applications range from large, parallel models/simulations of the physical world using high performance computing systems to smaller scale simulations developed by a single scientist or engineer on a desktop machine.
- Applications that support scientific endeavors. Such applications include, but are not limited to, systems for managing and/or manipulating large amounts of data and systems that provide infrastructure for scientific or engineering applications.

Despite its importance, the development of CSE software historically has attracted less attention from the SE community than other subdomains have. Indeed, the development of CSE software is significantly different than the development of business information systems, from which many of the SE best practices, tools and techniques have been drawn. Most conference and journal venues focus either on the SE domain or on the CSE domain, but rarely on the intersection of the two domains. Specifically, within the CSE community, there are few places to publish research related to the unique SE challenges faced by CSE developers along with the approaches identified to address those challenges. The goal of this workshop is to provide a unique venue for researchers from SE and from CSE to interact and to support the building of a common research agenda to deal with the complex software development issues present in the CSE domain. Furthermore, the discussion among these two groups of researchers will be invaluable in identifying those aspects of SE that should be considered for CSE education programs.

This workshop will build upon results from previous editions of the workshop in the SE-CSE series. Similar to the format of the previous workshops, in addition to presentation and discussion of the accepted papers, significant time during the 2013 workshop will be devoted to the continuation of discussions from previous workshops and to general open discussion.

Submission Instructions
The organizing committee encourages participation form members of the SE and the CSE communities. Papers of at most ten pages are solicited to address issues including but not limited to: 1) Case studies of software development processes used in CSE applications; 2) Measures of software development productivity appropriate to CSE applications; 3) Lessons learned from the development of CSE applications; 4) SE metrics and tool support for CSE applications; 5) The use of empirical studies to better understand the environment, tools, languages, and processes used in CSE application development and how they might be improved; 6) V&V techniques specifically targeted for the CSE domain; 7) Practical experience reports; and 8) SE education in the CSE domain.

In order to increase participation, we will also accept shorter (~3-4 page) position papers. These papers will not be included in the proceedings, but will be made available to workshop participants prior to the workshop. A position paper should include POSITION PAPER in the title.

Please observe the following:
1. Papers should be at most 10 pages.
2. Format your paper according to the ICSE 2013 guidelines
3. Submit your paper in PDF format: https://www.easychair.org/conferences/?conf=secse2013
4. Deadline for submission: February 7, 2013
5. Submission notification: February 28, 2013

For more information, please contact Jeffrey Carver (carver@cs.ua.edu).