2011 Call for Presentations

Submitted by Katie Dey on Fri, 08/05/2011 - 8:40am

The Eleventh Annual
High Confidence Software and Systems Conference
Call for Presentations

Introduction

Our security, safety, privacy, and well-being are all increasingly dependent upon the correctness, reliability, and integrity of software-intensive systems of all kinds, including cyber-physical systems (CPS). Our systems must be capable of interacting correctly, safely, and securely with humans and the physical world even while they operate in changing, difficult-to-predict, and possibly malicious environments. New foundations in science, technology, and advanced practice continue to be needed to build and assure these systems and to move towards more effective models for acceptance and certification.

Conference Scope, Goals, and Vision

The High Confidence Software and Systems (HCSS) Conference, now in its second decade, draws together researchers, practitioners, and management leaders from Government, universities, and industry. The conference provides a forum for dialogue centered upon the development of scientific foundations for the assured engineering of software-intensive complex computing systems.

The technical emphasis of the HCSS conference is on mathematically-based tools and techniques and on scientific foundations supporting evidence creation and systems assurance and security. The HCSS vision is one of engaging and growing a community?including researchers and skilled practitioners?that is focused around the creation of dependable systems that are capable, efficient, and responsive; that can work in dangerous or inaccessible environments; that can support large-scale, distributed coordination; that augment human capabilities; that can advance the mission of national security; and that enhance quality of life, safety, and security.
Conference Presentations

The conference program features invited speakers, panel discussions, and a relevant and compelling technical track that features two kinds of talks:

- Experience reports. These talks inform participants about how emerging HCSS and CPS techniques play out in real-world applications, focusing especially on lessons learned and insights gained. While experience reports do not have to be highly technical, they should emphasize substantive reflection on all aspects of experience, building on data and direct experience. Experience reports can focus on topics such as architecture and requirements, use of advanced languages and tools, evaluation and assessment, team practice and tooling, supply? chain issues, and so on.
- Technical talks. These talks focus on informing the audience regarding specific techniques or methods, ideally from the point of view of someone with experience in practice. There is a wide range of relevant topics, ranging from theorem proving and analysis to techniques for modeling cyber-physical systems or for certifying large systems. While these talks will often focus on the details of a particular technique, they should nonetheless be accessible to the broad HCSS and CPS audience.

Process for Submission

We invite you to submit a proposal to give a talk at the conference. If you are interested in offering a talk?or nominating someone else to be invited do so?send an email before March 7, 2011 to presentations@hcss-cps.org that includes a short description of what you?d like to talk about or what you propose as a topic for your nominee. Submissions should be about one page long. Talks will be selected by March 31.

Because the conference is intended primarily to support open technical exchange, there will be no formal proceedings; however, slides and supporting papers will be made available online on the HCSS website.

Important Dates

March 7, 2011  Submission deadline
March 31, 2011  Notification of acceptance/rejection