AN OPEN SOURCE FIELD TRIP FOR FACULTY[*]

PRE-CONFERENCE WORKSHOP

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ABSTRACT

Student participation in Free and Open Source Software (FOSS) projects and communities offers excellent opportunities for learning and for developing student interest in computing. This workshop will be a virtual field trip for faculty wanting to know more about FOSS communities, practices, and tools so they can take advantage of this opportunity. The workshop will provide an overview of FOSS from a development perspective, hands-on activities to introduce FOSS tools, and examples of student participation in FOSS projects. Participants will also be introduced to a variety of resources that support faculty and student participation in FOSS communities. The intended audience is computing educators at the college or high school level.

AGENDA

This workshop builds on prior workshops related to student participation in FOSS. These include an NSF-funded workshop on involving students in the development of Humanitarian FOSS, and the Red Hat Professor's Open Source Summer Experience (POSSE). To the extent possible given the venue, the workshop will involve hands on work. The workshop will include discussion among participants. Topics will include:

1. The Landscape of Open Source Software
   • The FOSS movement/concept, history, principles and economics of FOSS
   • Educational potential of student participation in FOSS communities
2. Virtual Field Trip: FOSS forges and project sites
   • Common features
   • Evaluating a FOSS project for possible student participation

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3. Virtual Field Trip: FOSS tools and techniques
   - Collaboration and knowledge sharing tools
   - Project control tools
4. Examples of FOSS in Education
   - Approaches to incorporating FOSS participation
   - Examples for students with strong computing background
   - Examples for non-majors and students with less computing background
   - FOSS for social good.
5. Roadblocks and Resources
   - Potential roadblocks and resources related to student FOSS participation
   - Getting started
6. Wrap-up
   - Discussion about potential for FOSS in computing education.
   - Discussion about collaborating on projects.

PRESENTER BIOGRAPHIES:

Mel Chua is part of the Red Hat Community Architecture team. She has worked on a variety of open source projects including Fedora, Sugar Labs, and One Laptop Per Child. She is currently organizing the Red Hat Professor's Open Source Summer Experience (POSSE) to help faculty gain FOSS skills and knowledge.

Sebastian Dziallas is the engineering manager for Sugar on a Stick (SoaS), a Fedora-based Linux distribution for the Sugar Learning Platform, originally deployed by the One Laptop Per Child (OLPC) project. Sebastian is also a Fedora packager and the founder of Fedora's Education SIG. In his free time, he is a student at Olin College of Engineering in Needham, MA.

Gregory Hislop holds faculty appointments in Information Science and Technology and Computer Science at Drexel University. He PI on the HumIT project and co-PI on SoftHum project (see xcitegroup.org). Dr. Hislop has 15 years experience leading development of curricula in SE, IS, and IT, and spent almost 20 years as an IT professional.

Clif Kussmaul is Associate Professor of Computer Science at Muhlenberg College and formerly Chief Technology Officer, Elegance Technologies, Inc. and has 15 years of experience in software development, FOSS, and computing education He has contributed to a variety of FOSS projects including Drupal, Moodle, Twiki and Trac. He has also guided student participation in FOSS.