

## **GSAW 2012 Tutorial I:**

Using Open Source Software in Ground Systems

**Length:** Half day

### **Overview:**

This tutorial serves to introduce and educate software developers, system architects, project managers, program managers, and others in the state of the art in open source software development (OSSD) processes, work practices, and project community dynamics. The focus is to examine and review results from empirical studies of OSSD that have appeared in the past five or so years. These include studies that examine OSSD projects within both commercial and non-profit environments, as well as those that produce embedded or mission-critical applications, software development and dispersed teamwork collaboration tools. They also include review of recent government policies and initiatives within the DoD community that encourage the acquisition, development, and deployment of mission-critical software systems that embody “open architecture” (OA) concepts that include the integration of OSS systems/components. Overall, this tutorial will help establish a foundation for identifying issues, challenges, and opportunities that can arise when engaging OSSD processes, practices, and project communities.

**Instructor:** Walt Scacchi, Institute for Software Research, University of California, Irvine

### **Biography:**

Walt Scacchi is senior research scientist and research faculty at the Institute for Software Research, and also research director of the Game Culture and Technology Laboratory, both at the University of California, Irvine. He received a Ph.D. in Information and Computer Science from UCI in 1981, and was on the faculty at the University of Southern California from 1981-1998, where he created and directed the System Factory Project from 1981-1991, and the ATRIUM Laboratory from 1992-1998. He joined ISR in 1999. Dr. Scacchi research interests include free/open source software development, computer games and virtual worlds, acquisition and electronic commerce, software/business process (re)engineering, and computersupported cooperative work environments. He is an active researcher with more than 150 publications. He has developed and directed more than 60 externally funded research projects, and has consulted for dozens of firms on a regional, national, and international basis. He currently serves as Principal Investigator on six research projects with funding from the National Science Foundation (three projects), Naval Postgraduate School (two projects), and Daegu Global R&D Collaboration Center (Daegu, South Korea).

### **What Participants Should Expect to Learn:**

The participants should expect to learn

- the state of the art in OSSD processes, work practices, and project community dynamics, based on review of empirical studies of OSSD
- understand the roles and relationship of OA and OSSD

**Who Should Attend:**

Intended participants for this tutorial include software developers, system architects, project managers, program managers, and others who anticipate the acquisition, adoption, implementation, or integration of OSS systems, components, processes, practices, or project communities in current/future system development efforts.