

Tuesday Evening Monthly Program – August 11, 2009

5:30 pm Board of Directors Meeting, Social Half-Hour and Snack.
6 - 7:00 pm Presentation followed by questions.



Place: Santa Clara University
Bannan Engineering
Building 404, Second Floor Conference Room 230

Santa Clara University Campus Map Directions, including Transit information

<http://www.scu.edu/map/index.cfm?i=5> <http://www.incose.org/sfbac/Directions-to-SCU.html>

From the main campus entrance on El Camino Real in Santa Clara, CA, stop at the visitors entrance booth and ask for a "Visitors" parking permit. Say you are here for a meeting and that you are an invited guest of the Dean of Engineering. Park in the parking garage in the visitor's parking spaces or in any other available "Visitors" parking space.

If you have any questions about SCU, you may contact Campus Security at 408-554-4441.

SFBAC will be offering a **Live Meeting Option** for the monthly INCOSE meetings. The first offering will be Tuesday August 11th. We performed a trial run and everything went smooth. Please be patient with us if there are technical difficulties during this meeting.

<https://www.livemeeting.com/cc/incose/meet/T8KHCG>

Voice over the phone will be at:
1-866-398-2885
Passcode: 674493

Food Donation: FREE for members; \$4 for non-members.

For more information, contact:

Dave Mason, 408-742-0688, (david.mason@incose.org) or
Chin-An Cheng, 650-354-5913, (chinan.cheng@incose.org) or
Danny Hahn, 650-966-2107, (danny.hahn@incose.org) or
Dorothy McKinney, 408-742-8790, (dorothy.mckinney@incose.org).

For information about this mailing list please visit <http://www.incose.org/sfbac/mail.html>

The mission of the International Council on Systems Engineering (INCOSE), a non-profit professional society, is to "foster the definition, and practice of World Class Systems Engineering in industry, academia, and government."

The SF Bay Area Chapter presents thought-provoking monthly programs for its members and their guests. Learn about INCOSE at <http://www.incose.org>.



Speakers: Dr. Scott Workinger

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707-632-5134

Topic: What Every Systems Engineer Needs To Know About Test Engineering

Test engineering is so critical to the success of systems engineering that many engineers consider test engineering a branch of systems engineering. Indeed, both disciplines have an integrative perspective and a concern with the performance of the system as a whole. Effectively, test engineering is where “The Rubber Meets the Road” for systems engineering. Hence, systems engineers that care whether or not their systems perform as intended have a serious stake in test engineering.

This presentation focuses upon the interfaces between test engineering and systems engineering, from the perspectives of 1) How test engineering provides critical input for the systems engineering process and 2) How systems engineering input to test engineering is crucial to the success of the test engineering process. Issues that will be discussed include: achieving accurate verification and validation, managing risk of system failure, why diagnosis is important and the major types of system test engineering diagnosis, why systems engineers need to be concerned with testability, why the black box view of a system is not adequate for testing many systems, the test environment as a system, why testability cannot be assumed, the elements of well-structured evaluations, and emerging Issues in systems test engineering that impact successful system performance.

Biography:

Dr. Scott Workinger has 30 years experience leading organizations that create innovative, practical solutions to business problems and field working systems in a multi-disciplinary context. He has led multi-disciplinary analysis and innovative development efforts in complex, risk-laden environments in the fields of information technology (expert systems, operations analysis, CAD, collaboration technology), manufacturing (automotive, glass, optical fiber), and construction engineering (nuclear, pulp & paper). He currently teaches courses on technical leadership, systems architecture, testing and evaluation, problem analysis and systems engineering. He consults on strategic management and technology issues. The students in his continuing education courses come from a broad cross section of backgrounds and include experienced leaders and technologists from such diverse backgrounds as the US Navy, NASA, pharmaceutical companies, aircraft program management, and systems engineering consulting firms. Scott is a member of INCOSE. He has a B.S in Engineering Physics from Lehigh University, an M.S. in Systems Engineering from the University of Arizona, and a Ph.D. in Civil and Environment Engineering from Stanford University where he performed research at the Center for Integrated Facility Engineering on integration between engineering processes and design models. Scott has a passion for empowering next generation business processes through research, application, and teaching. His particular forte is the application of diverse interdisciplinary resources to solve extremely challenging practical problems.