GSAW 2004 Tutorial VI:

Risk Management for Software-Intensive Systems

Length: Half day

Overview:
This tutorial will summarize future trends causing systems to become more software-intensive and subject to new sources of risk. It will provide a risk management framework for addressing such risks, composed of Risk Assessment (risk identification, analysis, and prioritization) and Risk Control (risk management planning, monitoring, and corrective action). It will present critical success factors and best practices for these steps, and illustrate their use via aerospace examples. It will relate these practices to the CMMI process area for Risk Management, and to the risk-driven spiral model for software-intensive system acquisition.

Instructor: Barry Boehm, University of Southern California - Center for Software Engineering

Biography:
Barry Boehm is the TRW Professor of Software Engineering and Director of the Center for Software Engineering at the University of Southern California. He received his B.A. degree from Harvard in 1957, and his M.S. and Ph.D. degrees from UCLA in 1961 and 1964, all in Mathematics. In 2000, he received an honorary Sc.D. in Computer Science from the U. of Massachusetts. Between 1989 and 1992, he served within the U.S. Department of Defense (DoD) as Director of the DARPA Information Science and Technology Office, and as Director of the DDR&E Software and Computer Technology Office. He worked at TRW from 1973to 1989, culminating as Chief Scientist of the Defense Systems Group, and at the Rand Corporation from 1959 to 1973, culminating as Head of the Information Sciences Department. He was a Programmer-Analyst at General Dynamics between 1955 and 1959. His contributions to the field include the Constructive Cost Model (COCOMO), the Spiral Model of the software process, the Theory W (win-win) approach to software management and requirements determination. He is a Fellow of the leading professional societies in computing (ACM), aerospace (AIAA), electronics (IEEE), and systems engineering (INCOSE), and a member of the U.S. National Academy of Engineering.

Description of Intended Students and Prerequisites:
Acquisition managers, system engineers, project managers, and software engineers concerned with successful acquisition and development tof software-intensive systems.