AN OVERVIEW OF THE OPERATION OF THE NCSU COMPUTER
SCIENCE SENIOR DESIGN CENTER: FACILITATING THE
TRANSITION FOR GRADUATING SENIORS

presented by

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Abstract:
The North Carolina State University (NCSU) Department of Computer Science (CSC) has established a Senior Design Center (SDC) with the mission of integrating technical projects, teaming, professional communication skills (writing and speaking), and a software development process into an undergraduate capstone design course. The SDC was established in 1994 to facilitate interaction between the Computer Science Department and North Carolina industry for the purpose of providing computer science seniors realistic project experiences by offering a 15-week project course, CSC 492. Students in the course are required to participate in an industrially-sponsored project that must be completed in accordance with a software development process adapted exclusively for CSC 492. Each student is assigned to a team, is expected to contribute to the design, implementation and documentation of a project, and is expected to make at least one technical oral presentation. Individual teams are formed each semester and divided among sections of CSC 492. Each section is team taught by a technical advisor and a certified team specialist/technical communicator. These instructors assist students with technical direction of projects, team coordination, professional communication, and project management. In addition, industrial mentors from sponsoring companies provide project details and work closely with student teams throughout the semester. During this talk, Ms. Margaret Heil (Director of the NCSU CSC SDC) will summarize the details of operating the SDC. The process begins with outreach to industrial sponsors, collecting and tailoring project descriptions to suit the needs of the course experience. Issues related to the administration of the SDC will also be covered, including challenges as a result of increased enrollment and number of Senior Design sections. The pedagogical approach used in CSC 492 will be presented, covering the integration of software engineering principles/methodology, technical components, project management, leadership, teaming, writing and speaking.

Bio:
Ms. Margaret R. Scaturro Heil earned her undergraduate degree in Biology and English Literature from McGill University (Montreal, Canada) and a Masters degree from North Carolina State University (NCSU) in Technical Communication. She also has a Team Specialist Certification from NCSU’s Industrial Extension Service. Ms. Heil is currently the Director for the NCSU Computer Science Senior Design Center (SDC). The SDC’s mission is to educate students by providing a real industrial software development problem and by teaching and integrating the principles of software engineering, teamwork, and professional communication in the solution of that problem. As a technical communicator, Ms. Heil assists students with team formation and development, project management, interpersonal communication, written documentation, and oral technical presentations. As administrator of the SDC, Ms. Heil coordinates a staff of technical advisors and teaching assistants working with and evaluating students across all sections of Senior Design. She is also responsible for communicating with SDC sponsors, refining project descriptions in cooperation with SDC technical advisors, and coordinating project set up with departmental IT staff.

Friday, September 25, 2015 @ 2:30 pm     McAdams Hall, Room 119

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