The Florida Tech Computing Alliance
Minutes of the Meeting April 15, 2005 *

Department of Computer Sciences

April 15, 2005

Attending: William Shoaff, Steve Cook (Harris), Chuck Cottrell (Accent Technologies), Monte Hancock (Essex), Chad Sereno Ron Higgins (Northrop-Grumman), Chad Sereno (Modus Operandi), Colleen McCreary (EA), Brandon McMillon (Microsoft), Steve Lindsey (Sun), Alexander Soya (Logan Industries), Gregg Stubbendieck (EA)

1 Lunch Orientation

The members met for lunch to discuss the events of Senior Design Day. Senior Design Day is similar to a science fair. All programs in the college that have a senior project require the project teams to demonstrate their work. The primary purpose of the day for the Computing Alliance was to judge the work of graduating seniors on their major projects. Members were given an evaluation packet (which had been previously emailed to them) that contained a list of all senior project teams, boxes to mark if the project demonstrated an outcome, and boxes to mark an rating of the project based on criteria: originality, challenging, solution creativity, completeness, and impact. The members were asked to interview the teams about their projects and return later to discuss their impressions, where they, along with graduate students members of Upsilon Pi Epsilon (the Computer Science Honor Society) would select a best project in the department and several honorable mentions.

2 Senior Project Review

The members spend about 2 hours, from 1:00 pm until about 3:00 pm looking at senior projects and discussing the projects with team members.

*Minutes are available on line at http://www.cs.fit.edu/GenerallInfo/alliance/minutes/springa05/
3 Senior Project Evaluation

The members of the Computing Alliance and UPE members met and unanimously selected the “MMCd: Palm Based Automotive Diagnostic and Datalogging” project as the best project in the department. Team members were Brian Garst (Computer Science) and Steve Schafer (Information Systems). Honorable mentions were given to:

- “Algorithm Tutorial Tool,” by Rob Messersmith (Computer Science), Darryl Smith (Computer Science) and Leslie Laluzerne (Computer Science)
- “Perfect Phylogeny” by Augustina and Siranush Sarkizova (Software Engineering)

A discussion of the projects ensured. Monte Hancock mentioned his work with Rollins and Webster. He suggested that non-profit organizations often have projects that would be appropriate for our students and he would be willing to help us make contacts. Starting projects in the Junior year was supported by many members. Steve Lindsey and Ron Higgins offered to give workshops on methodologies such as ITIL, CMM, ISO and other techniques used for software development. Several members volunteered to pitch projects in Fall 2005. The use of open source and legacy code was suggested as a ripe source for projects. The inclusion of a business course was recommended, and the need to stress communication skills was also brought up. A systematic weakness in the projects was the inability to cogently explain the problem, the solution, and the accomplishments.

To better evaluate senior projects next year, the members asked that each team provide, prior to Senior Design Day, an executive summary, abstract, or flyer that describes their project. Also, evaluation of whether or not program outcomes were met was difficult given the number of outcomes and the limited time available to interview students. It was suggested that the outcomes be split among the judges.

After the meeting, the results of the judge’s evaluations were tabulated. There were 15 departmental teams participating in Senior Design Day. The list below gives the number (in parenthesis) of projects that demonstrated a particular outcome was achieved. Most judge did not filled out the form (it was too cumbersome), therefore this data may not indicate failure to achieve an outcome.

1. (4) Demonstrate knowledge of discrete mathematics, calculus, logic, probability and statistics;
2. (8) Use the scientific method to design and conduct experiments, as well as to analyze and interpret data;

3. (11) Apply skills in programming fundamentals and knowledge of data structures, algorithms, software engineering, and computer organization;

4. (2) Understand and follow appropriate professional, legal, and ethical practices;

5. (6) Understand the impact of computer technology in a global and societal context;

6. (0) Recognize the need for continual professional development;

7. (1) Use knowledge of historical and contemporary issues to make informed decisions;

8. (10) Demonstrate the ability to work as an individual with minimum guidance.

9. (0) Function effectively on multidisciplinary teams using their understanding of team dynamics;

10. (10) Communicate effectively in writing, oration, and diagrams to a range of audiences about computing problems and their solutions.

11. (11) Conceptualize, design, and implement computer-based systems;

12. (3) Design a package, class, or method to meet performance requirements;

13. (10) Use effective tools to solve practical computing problems;

14. (9) Operate computing equipment and software systems effectively.

4 Adjournment

The members of the alliance were thanked for their participation. The meeting adjourned about 4:00 pm.