

Strategic Advisory Board Conference Call Minutes

Thursday, October 2, 2008

The NC State University Department of Computer Science Strategic Advisory Board met via conference call on Thursday, October 2, 2008. Below is a summary of the discussion points, actions and decisions.

Known Participants – C. Benson, T. Beyene, S. Chopra, W. Clark, K. Collins, J. Faulkner, J. Fearrington, K. Hibbard, K. Markham, L. Newberry, R. Stiles, K. Tate, M. Vouk, E. Wagner, B. Weiss, and S. Worth.

Department Update – Dr. Vouk provided an update on several key departmental initiatives and indices:

- **Enrollment Numbers**

| | |
|------------|------------------|
| Undergrads | 614 |
| Masters | 316 |
| Doctoral | <u>174</u> |
| | 1104 trending up |

- **Incoming Freshman Class** (all indices trending upward)

| | | |
|-------------|------|--|
| Total | 128 | (up from 113, representing a 13% increase) |
| Females | 20 | (15.6%, up from current 11% - nice trend, but we need to continue our focus on this group. The department has joined other major universities as a member of the National Center for Women & Information Technology's academic alliance, and we hope to leverage experiences and best practices shared with this group, and to seek special project funding through NCWIT channels to continue this upward trend.) |
| Average GPA | 4.29 | |
| Average SAT | 1250 | |
| | 50% | in top 10% of their graduating class |

- NSA has recognized us as one of just 23 **National Centers of Academic Excellence in Information Assurance Research** – one of only two schools in NC to be so recognized!

- **Research Update**

- 2007-08, we submitted 92 proposals valued at \$50M, compared to 91 / \$28M in 2006-07. (represents 79% increase in proposal \$ volume)
- 2007-08 Awards – 42 for \$7.6M vs. 38 for \$3.74M in 2006-07. (102% increase!)
- Strong start to 2008-09!
 - \$2.5M award to James Lester
 - \$300K Tao Xie
 - \$268K Doug ReevesThese are just a sampling; many others awarded under \$200K

- **Hiring Focus** – Currently seeking addition of 2-3 new faculty, with a focus on software engineering and gaming. Could be delayed or limited by current and pending budget cuts and freezes by the state.

- **Faculty Retreat/Strategic Thrusts** – Dr. Vouk thanked the SAB for their role in our annual strategic planning process, as many of their comments and recommendations were integrated into the discussions at the Faculty Retreat in August. We forgot to mention this on the call, but as a result of this strong engagement, we will expand ex-officio membership to the SAB to include both the chair and vice-chair of the faculty

Strategic Planning Committee, and invite all members of the SPC to attend and participate on all SAB calls and meetings.

Development & External Relations Update – Ken provided an update including:

- **Achieve Campaign** – \$1.4B results (\$1B goal) over 7 years. Department accounted for approximately \$40M; including one named professorship, 200% increase in our endowments (from 6–18!), and a strong level of unrestricted support through our ePartners program.
- **New Corporate Partners** – AT&T is our latest Super ePartner. New ePartners include BCBS of NC, Bronto Software, Northrop Grumman, Thomson Renters and Wingswept.
- **Significant Gifts** – NC Chapter of Society for Information Management (SIM) will sponsor our 19th Endowment, Cisco has donated a TelePresence unit worth \$650K (ribbon cutting on October 13—1st of 12 U.S. schools to receive one), 8 faculty have won IBM Faculty Awards valued at over \$250K, working with several individual donors on estate plans.
- **Fidelity Investments Speaker Series** – Off to a strong showing. Standing room only for Mike Capps. Jim Davis on October 14 and Marshall Brain on November 4. Spring speakers include Dr. Diana Oblinger, Jim Tobin, and Joe Freddosa. Please attend!
- **Recent mailings** – Ting Yu postcard, Fidelity Investments postcard, new Points Of Interest document.

SAB Business

- **Contact Sheet** – Please review and provide updates to Ken.
- **Membership Guidelines** – changes include
 - Timing clarification, Page 1
 - Nomination rules, Page 2
 - Clarification of expectations relative to financial support of department, Page 2
 - New section on leadership roles.

Motion to accept recommended changes to guidelines came from Bill Weiss, seconded by Jesse Fearington, and unanimously approved by voice vote.

- **Objectives** – In SAB minutes, we asked for input on the suggested 2008-2010 SAB Objectives (see below) and received very little. We ask everyone take another look and provide comments, feedback; we will review and discuss on our January call.

SAB Objectives 2008-2010 – Draft based on suggestions during April 2008 meeting.

- Expand scope of board membership to include additional representatives from other related communities of interest (higher education, state government, department of commerce, international, Math & Science School, etc.)
- Formally define roles of Chair & Vice-Chair, including terms and selection process.
- Develop strategy to grow Diversity in Computer Science Endowment to \$250K or more (to allow for a \$2,500 renewable scholarship to be awarded annually).
- Influence addition of at least one new endowed chair within department.
- Continue to establish and nurture advocacy relationships with influential organizations and groups (NCTA, CED, NCSU Board of Trustees, General Assembly, etc.)
- Participate in Open House, class & lecture presentations, panel discussions, outreach initiatives, recognition events, etc.
- Continue to serve as ambassadors, helping build and sustain the image and brand recognition for the department.

- **Nomination Process**

- With Vivien Joklik's resignation from the board (no longer with John Deere), we have 20 board members, not including emeritus or faculty members, meaning we can take as many as five new members this spring. Ken has already received several strong candidates, but we can continue to accept nominations
- Any nominations from the board should come to Ken by December 1st.
- We will discuss at January call and extend invitations by February 1st.

- **Future Schedule**

- January 8th conference call – 3pm EST, “meet me” bridge # 919-515-7150
- Spring meeting on April 1 & 2
 - New member orientation on 4/1 at 3pm
 - Reception and dinner – 4/1 at 5pm, Park Alumni Center
 - Meeting here at EBII on 4/2.

Group Discussion – Dr. Michael Carter, associate dean of graduate school, led the group in a discussion of "Communication Skills: What Are the Industry Expectations for Software Engineering Graduates?". Results of the discussion are provided below. Dr. Clark asks that participants review and let him know if there are clarifications or additions (mpc@gw.fis.ncsu.edu):

Graduates of software engineering programs should be able to:

- Stand up in front of a group and lead a productive discussion
- Present information in a way that goes beyond the specific details of a project to provide the big picture, a higher level of summary
- Resolve conflicts
- Use tools (such as blogs, IM, email) that are appropriate to the situation and audience
- Demonstrate a mastery of the kinds of communication most often used in the industry: email, teleconferences, status reports, meetings, oral presentations, etc.
- Give effective PowerPoint presentations: take a concept and break it down into 4 or 5 slides; instead of reading slides, provide focus, context, and/or elaboration for material on slides
- Present information concisely in all modes of communication
- Use email appropriately, demonstrating an understanding of what information should be included and what should not, of the kinds of communication that are suitable to email, of when to use reply all, and of the necessity to read carefully before sending
- Take criticism as a constructive contribution to the outcome of a project (without getting defensive) and to give criticism constructively
- Show that they understand issues related to business and marketing
- Work productively on integrated project teams
- Work productively on virtual teams (geographically distributed), including a sensitivity to the kinds of language and actions that people in other countries could find confusing or offensive
- Communicate effectively with people outside their own units in an organization and with customers and end-users
- Use digital tools that are beneficial for communication and teamwork, such as programs like Photoshop (bit map) and Illustrator (vector) for presentations, documentation and web pages; basic video/audio capture and editing for presentations, shows, and tutorials; GUI design that is intuitive; project planning graphics like Gantt charts (programs like Visio); and tools for tracking bugs in a design team on local network or web.

Recommendations for changes in the curriculum

- Integrate more of a business perspective

- Provide ample opportunities for students to give brief status reports and other kinds of business communication throughout the curriculum
- Provide opportunities for more instruction and practice in giving oral presentations before senior design
- Ask students to take a course in communication earlier in the curriculum
- Require or strongly encourage students to take technical communication (ENG 331)

Closing Remarks – Jesse reminded the group of our **next call (Jan 8th @ 3 pm)** and our **Spring Face-to-face Meeting** here in Raleigh (**April 1st (evening only) & 2nd (all day)**). **Please reserve the dates on your calendar now.** More details to follow.