Department Council Meeting  
April 4, 2008

The meeting was convened by Larry Davis at 12:10pm. He reviewed the meeting’s agenda and began the discussion with the possibility of reconstituting an advisory board. Approximately two years ago the last meeting of the department’s board was held. The board was composed of members predominately from academia and industry. Several CS faculty members made presentations regarding educational topics and current research that was being conducted. Although the information was of interest to the members, no fruitful action items came from that meeting nor any of the other earlier meetings that were held. Issues that the board members wanted to pursue where not considered beneficial to the department and those that might be beneficial to the department were not of interest to the board.

The purpose of raising this topic is to consider if a different focus for constituting a board could help the department in future planning. How can a board be useful to the department? Larry began with his own views:

Constitute an Industrial Advisory Board
1. Composition should predominately be local representatives (perhaps easier to call a meeting; lower expenses; knowledgeable about the metropolitan area).
2. Most representatives should come from business who are at high levels within the company.
3. Limited representation from government

A comment was made that perhaps such people could advise the department on the curriculum and whether what is taught produces graduates with the skill level needed to secure jobs and which satisfy business employment needs. Larry indicated that many of the people who hold these high level positions are not sufficiently knowledgeable about the realities of curriculum planning/academics to hold a helpful discussion.

Another option would be to discuss if additional M.S. degree programs would be helpful to business based on job market requirements. The possibility of exploring joint research projects with businesses could also be pursued; however, Larry said that this was one of the responsibilities of the V.P. for Research and he and others had met with company representatives on various occasions to exchange ideas.

Larry asked the council members if the department should be concerned about the decline in number of UG CS majors? Is this a topic that should be discussed by a board?

The University’s UG admissions process is not understood by him nor Dean Halperin. Requests made to Provost Nariman for information have not provided any insights, thus far. It is possible that once the current cycle of admissions is over, some further details
may be provided. It appears that the campus is trying to meet criteria which support diversity/ethnic groups, geographical representation, commuters vs. on-campus residents etc. It is not clear how these criteria are weighted against SAT scores, grade point averages, or student success rates. The committee members felt that this information would be useful not only for recruitment but to attract and keep the best students who may be interested in CS. If a board existed, the board could raise these issue with the Provost and might receive more feasibility/attention than a department raising the same issues.

Another purpose of constituting a board would be to generate funds from the members and secure student internships from the companies that they represent.

A question was asked, “Of those students who transfer into CS, what disciplines are they coming from?” Seems that there is a broad spectrum of disciplines which are represented: Mechanical Engineering, Physics, Mathematics, and even the Classics. Students will take a CS course and become interested in the major when they realize they enjoy the work and receive good grades. Others are friends of CS majors and become interested in the discipline due to discussions.

Larry asked what the committee thought of offering a non-programming major? For example, there might be a Theory of Computational Science major. It would not be an “easier” degree to earn but would attract a different group of very smart students. A similar major is being developed at MIT. One member felt that more women might be attracted to such a major because it would be academically challenging but represent less of the stereotype CS student.

This lead to the next agenda topic: What should be covered at the next Faculty Retreat?

1. Discuss the development of a non-programming major
2. Revisit the UG entry course sequence
3. Does CMSC 212 need to change or does CMSC 132 need to better prepare students for success in CMSC 212? It was noted that very strong students who are accustomed to receiving A’s will often transfer out of CS when they receive a B in CMSC 212. They feel that they can not handle the subject matter and switch to a major where they will be challenged but will also feel successful (success being defined as receiving A’s).
4. Should students have an easier way into the CS major?
5. Why is there no CS course considered as a ‘core’ requirement at the university? Such a change in campus curriculum could, in the future, change the intro course sequence.

Larry suggested that Jeannette Wing invited to campus (not just the department) to give her presentation on computational thinking. This presentation would feed into the campus strategic planning process and could help a number of departments.
CS needs to be viewed as a “creative science” just as art is viewed as creative by the general population. CS fosters developing creative ideas and then provides opportunities to carry-out the idea and see it developed into reality. It is thought that students do not currently see the creative side of the discipline and think of it as endless hours of programming. Programming may be the vehicle to developing the idea but should not be seen as the end product. Often students do not make the connection between what they must do or learn in order to reach the level of accomplishing what they want to do in the future.

It is possible that the UG curriculum needs more emphasis on “research” and the department might consider forming some type of ‘research institute’ for UG students. The department needs to develop a reward system (not based on giving money to students) to get students excited about what they are learning. As an example, provide space to students engaged in research so that they have space to develop their ideas and show their friends what they are doing.

The last topic on the agenda was the campus strategic plan. One council member felt that there were many progressive ideas reflected in the draft but it also implied that a large amount of power would be centralized under the Provost’s office. There was mention of Deans having some authority but what that would be was not clear in the draft plan. How implementation of the plan would be made and assessed was also not outlined.

Summary: There was agreement that high priority items for the department should include:

1. Recruiting donors who will provide funding for a new CS building since without these funds, there will be no new CS facility in the near future.
2. Department participation in the development of the campus’s new core educational requirements, along with the potential development of new introductory CS courses that students could use to fulfill core requirements and learn about the intellectual content of our field.
3. Proactive planning for departmental/institute participation in the types of new initiatives envisioned in the draft strategic plan; a committee will soon be formed to brainstorm possible initiatives and to identify campus partners for pursuit of these initiatives.

The meeting was adjourned at 1:10pm.