Department of Computer Science
Education Committee Meeting Minutes
March 27 2015
CSIC 1122
2pm

Committee members present:
Chair: Khuller
Associate Chairs: Foster, Sussman
Professors: Agrawala, Cleaveland, Duraiswami, Elman, Foster, Gasarch, Hollingsworth, Jacobs, Katz, Mount, Nau, Perlis, Reggia, Srinivasan, Subrahmanian, Varshney
Associate Professors: Childs, Deshpande, Hajiaghayi, Keleher, Pop
Assistant Professors: Carpuat, Bravo, Khan, Mazurek, Van Horn
Instructors: Levin, Plane
Graduate Staff: Story
Undergraduate Staff: Adams, Kassir, Vaillancourt
Graduate Students: (2)
Undergraduate Students: Jeney, Rowan

(Regrets listed at end of minutes.)

Agenda:

1. Presentation of new course proposal for Data Science 32X: Deshpande
2. Presentation of creating Data Science Specialization: Deshpande
3. Presentation on replacing MS comp exam grades with course grades: Foster
4. Discussion of Graduate Certificate in Data Science: Deshpande

Sussman called the meeting to order at 2:05pm, and the committee reached quorum at 2:12pm.

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Deshpande began the meeting with a presentation on the course proposal for Data Science to “introduce a new course called ‘Introduction to Data Science’ that covers basic data management (SQL, MapReduce) and basic stats and ML (machine learning), with a focus on usage and functionality.”
He went on to justify the creation of the course saying that students would be better served with a 300-level introduction to the course which would then allow for the 400-level Database and Machine Learning courses to be taught with greater complexity and depth. The prerequisites for this 300-level course would be CMSC216 (Introduction to Systems) and 250 (Discrete Structures). For additional information, please read the proposal.

After the proposal, it seemed that all were in agreement about the creation of the course. Hollingsworth called for the vote; Cleveland seconded.

All votes were in favor of the proposal to add CMSC3XX—a course on Data Science to the Undergraduate Program in CS.

The proposal passed.

Next, Deshpande presented his proposal on the creation of the Data Science concentration. He stated that the specialization would be analogous to the Cybersecurity Concentration that currently exists in the undergraduate major. He listed the requirements of the concentration which include the following courses: CMSC (131, 132, 216, 250, 330, 351), MATH (140, 141), and a course that has MATH141 as a prerequisite as well as STAT4XX.

The specialization requires that at the 300-level, students must take the 300-level data science course that had just been approved by the committee as well as the following courses:

CMSC422 (Machine Learning), CMSC424 (Database Design), STAT400 (Students take this as a part of the major), one of the following courses: an additional 42X course or CMSC402 as well as one of the following courses: CMSC451 or CMSC460

In order to assure that students have experience in other areas of CS, they would be required to take two of the following courses: CMSC (411, 412, 414, 417, 430, 434, 435).

After the proposals, questions ensued.

Duraiswami asked why the concentration was important considering the amount of courses students are required to take; He questioned the decision not to include CMSC/AMSC 460 as a mandatory course. Deshpande replied emphasizing the role that data science is beginning to play in the field, and felt that the other courses covered enough breadth.

Katz questioned how the concentration would fit into the major; Deshpande replied that the course would be used as one of the two upper level electives that are required for the major.

Srinivasan also asked about how the course would contribute to the breadth of the undergraduate major, and asked about programming languages used. Deshpande said that the students would be responsible for learning new material.

Levin questioned the specialization’s constraints on the major—i.e. would it be possible for students to be able to fulfill all requirements on time. Deshpande responded suggesting that things would be fine.

Reggia asked if the new course would be used as prerequisite for the 400-level courses in Machine Learning and Databases halting the speed at which students could advance to the 400-level, and
mentioned that he was concerned about the prerequisite structure. Deshpande said that he believed that course would have the prerequisite, but that this issue would be held to a vote at a later time.

Adams and Kassir also expressed concerns that making the 300-level course mandatory as a prerequisite would delay time to graduation.

Deshpande tabled discussion on prereqs to a later time.

Keleher suggested that someone on the committee called for a vote, Cleveland called for the vote, and Hollingsworth seconded.

In favor: 33
Opposed: 2
Abstained: 4

The proposal to add a concentration in Data Science for the Undergraduate Degree in Computer Science passed.

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At 2:28pm, Foster took the floor to propose that the committee vote to replace MS comp exams with course grades.

Now, graduate students are required to sign up for exams during the first month of the spring and fall semesters. It is mandatory for graduate students to sign up for comps in order that they be counted.

Foster’s proposal is to replace the comp grade requirements with course grade requirements for students entering in the spring semester of 2016 or later. This is to occur with no other changes.

For students who entered the program in 2015 or later, course grades will count as comp grades by default unless the student 1) notifies the grad office in writing.

The course requirements will be the same for MS with thesis and without.

Foster added that there are no MS specific exams in ECE. Only courses.

Questions followed.

Levin asked for a clarification of 2B in the proposal and wanted to ensure that students didn’t have to sign up for comps. Later, he added that he was pleased that there would be no more “writing in the notebook.”

Pop brought up a previous question of Samet’s (not present) as to whether or not the comps were a true reflection of competency.

Duraiswami asked a question about managing the students without a thesis and emphasized that it might be important. There was a little bit of discussion about the efficacy of the Master’s thesis.

However, in the interest of time, that discussion was tabled and all discussion of the proposal were ended.
Hollingsworth called for a vote. Sussman seconded.

In favor: 36

Opposed: 0

Abstentions: 4

The proposal to change the MS comp exams passed.

All matters up for vote at the education committee ceased at 2:38pm.

At 2:39pm Deshpande took the floor again to discuss the creation of the Data Science Certificate Program.

There was a great deal of discussion about revenue streams, who would comprise the student population, and the problem of finding instructors and professors to teach the courses. These things were cited all as necessary to have the program.

Khuller announced that if the program is run well and efficiently that the program could garner as much as $400K-$500K in revenue for the Department. The courses would be run in the evenings once a week.

Hollingsworth said that it was a good idea, but asked the department consider changing the four letter call sign to differentiate the program from CMSC. CMDS was thrown out as a suggestion.

Katz expressed concern about creating courses that don’t exist in the department already.

Gasarch announced that he didn’t believe that faculty would want to participate.

There was a small discussion about how to route the administrative arrangements and a suggestion that someone be hired to handle admissions and other duties.

This program, if initiated, would have to be up and running by March 2016.

Hollingsworth called for an informal vote in which committee members were asked to express support.

With the exception of one committee member, all remaining members expressed support for the certificate program.

Sussman adjourned the meeting at 3:03pm

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Regrets

Professors: Aloimonos, Bederson, Bhattacharjee (sabbatical), Davis, Hicks, Porter, Roussopoulos, Samet, Rupin, Shankar, Shneiderman

Associate Professors: Daume (leave), Kruskal, Momon, Purtilo, Spring

Assistant Professors: Freohlich (leave), Goldstein, Shi

Undergraduate Staff: Nolan