Report of the Graduate Program Revision Committee
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Introduction
This committee was charged with coming up with recommendations for improving the CS Phd program, building upon the 2006 faculty retreat report, “Revising Computer Science Graduate Student Requirements” (by Sussman, Jacobs, Hendler, Memon, Srinivasan).

In particular, this committee looked primarily at emphasizing the importance of research in the early stage of a student's Phd program, and making appropriate adjustments to the coursework requirements. Regarding the first aspect, the committee recommends introducing an “early research” requirement (recommendation 1 below). Regarding the second aspect, the committee decided to present two options for discussion: one option (recommendation 2 below) is to have a small set of core courses; the other option (recommendation 3) is to increase the flexibility in the current system (so it's either 2 or 3, not both). The committee also considered the reading list part of prelim exams (recommendation 4 below).

Recommendation 1 (adding an early-research requirement)
1a. The student must do a research project with a faculty member within 4 semesters. Student gets 898 credits (3 to 6 hours) for the research project. Group projects are possible.
1b. Student gives a public talk in the department at the end of the research, attended at least by the supervising faculty.
1c. Any student not satisfying this requirement must leave the program at the end of 4 semesters; a grace period of one semester is possible.

Recommendation 2 (changing Phd coursework requirement)
2a. Group the coursework into 4 areas (tentatively) as follows:
   - ThyAlg, Scientific Computing
   - PL-SE-HCI
   - Systems, DB
   - AI, Vision, Geometric Computing
   Bioinformatics courses are added to one or more areas.
2b. Faculty in each area would list 1 or 2 regularly-taught 600-700 courses in each area. These courses should lie at the core of the corresponding areas. No 8x8 courses should be listed. There should be some department-wide control on which courses qualify.
2c. Student takes one of these courses in each area in the first 4 semesters, and should get at least 3 A's and 1 B.
2d. Any student not satisfying this requirement must leave the program at the end of 4 semesters; a grace period of one semester is possible.
2e. Student takes 4 other 600-800 courses before advancing to candidacy. This allows students to take special topics and other “non-core” courses.

2f. The above four areas would also serve as the four areas for MS comps and MS coursework.

**Recommendation 3 (loosening current Phd coursework requirement)**

[**Current coursework requirement:** There are 7 areas of coursework, namely: AI, Systems, DB, SC, ThyAlg, PL-SE-HCI, Vision and geometric computing. Student is required to complete 7 courses in 5 areas in 5 semesters, with at most 2 courses in an area (except for PL/SE/HCI, where the student can take 3 courses but at most 2 in each of PL and SE/HCI). Student must get at least 5 A’s and 2 B’s in these 7 courses. Student is also required to do 2 additional courses (not subject to time limit or area).]

3a. Retain the current 7 areas: AI, Systems, DB, SC, ThyAlg, PL-SE-HCI. Bioinformatics courses are added to one or more areas.

3c. Retain the number of courses, time limit, and grade requirement: student takes 7 courses in the areas within 5 semesters, and gets at least 5 A’s and 2 B’s; student takes 2 additional courses not subject to time limit or area.

3d. Change distribution requirement: student takes at most 3 courses in any one area.

3e. Any student not satisfying this requirement must leave the program at the end of 5 semesters; a grace period of one semester is possible.

**Recommendation 4 (changing the format of the preliminary exam)**

4a. Separate the exam into a reading list part (1 hour) and a proposal part (1 hour). The two parts must be on different days.