

Planning for the Senior Project

Computer Science 190

Fall 2005

Part of the work in the Senior Seminar is to make plans for Senior Projects, a task that entails finding a topic and an advisor and obtaining approval for your project. The project itself is undertaken in the spring semester as CS 191.

In the fall semester, you must choose a topic and a faculty member to advise you. Generally, the topic is chosen and refined in discussions with the advisor. You may choose any topic, as long as it has some connection to Computer Science. If you are a Pomona student, your faculty advisor must be a member of the Computer Science faculty at Pomona College. You are free to seek additional assistance and advice from faculty of other departments and other colleges.

During the spring semester, you will work on your project. Because there are so many different kinds of projects, we have not set any intermediate goals. You and your advisor meet regularly, perhaps weekly, and together you will lay out the tasks to complete the project.

For the group of seniors as a whole, there will also be brief, monthly meetings in the spring to share ideas and progress. We will schedule a time near the end of the spring semester for oral presentations and a date by which the written reports are due.

Your project may be connected to one of the topics in the seminar, or it can be something completely different. You may choose to study theory, conduct an experiment, or implement a system. A project may be original work or expository. It may, or may not, involve intensive programming. The general requirements are as follows:

- The project must be a substantial effort that builds upon and integrates material in upper-division Computer Science courses.
- It must involve some background research into the historical context of the topic.
- It will be presented as a formal paper that includes a bibliography of works consulted. The bibliography should rely only sparingly (if at all) on online references such as web page URLs. We will expect you to consult papers from the literature where appropriate.
- There will be an oral presentation of the work at the end of the semester, roughly half an hour in length.
- The project must reflect the work expected in (at least) one half-course.

- The work presented cannot have been submitted previously for academic credit or pay. Your project may extend work done elsewhere, however.

A brief preliminary proposal is due on Friday, November 11. It should give the topic, the advisor, a one-paragraph summary of the project idea, and a preliminary bibliography.

A full written proposal will be due the last week of the fall semester. It should include the topic, the name of a faculty member who has agreed to serve as advisor, a partial list of bibliographic resources, and a one or two page description of what you intend to accomplish during the project. Think of it as a contract. The Computer Science faculty will review the proposals, and if necessary, discuss changes with you. The plans will be finalized before you leave for winter break.

Here are the important dates for the Senior Project:

| | |
|--------------------------------------|--|
| Friday, October 14 | Preliminary discussion |
| Friday, November 11 | Preliminary proposals due |
| Friday, November 11 | In-class discussion of project ideas |
| Friday, December 9 | Full proposals due; proposal presentations |
| Wednesday, December 14 | Proposal approval date |
| First week of Spring semester | Planning meeting |
| During Spring semester | Work on project with advisor; monthly meetings |
| End of Spring semester | Oral and written presentations |
| Sunday, May 14 | Graduation! |