UNIVERSITY OF CALIFORNIA
Department of Electrical Engineering
and Computer Sciences
Computer Science Division

CS 264
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Project Summary

Due: Week of 6 November 1995

Even if you've discussed your project with us, provide a written summary "for the record". In summarizing what you plan to do, answer the following questions. Please give a hardcopy of your summary to Allen.

- Describe the project that you plan to carry out. Explain not only what you intend to do, but what are the steps you will take to achieve your goal, i.e. what's the plan of attack?
- What's the motivation? What do you expect to learn? to contribute?
- How does the project relate to the class material, i.e. how will you apply what you're learning to the project?
- On what earlier work from the literature or from your own efforts will you build?
- On November 21, you should turn in a progress report. What are your milestones for that date, i.e. what to you plan to have accomplished by then?
- What are the risks in the project, i.e. what might go wrong that would make it difficult for you to do everything you'd like to do?

Note from Allen: I would encourage all of you to plan your projects with the goal of producing publishable research. At the end of the semester, it would be a shame to discard an 80%-finished project when with a little more effort it could be a useful publication. The benefit of preparing a paper and (with luck) going to a conference to present it will be immeasurable, especially if you are planning to do research in programming languages.

With this in mind, probably the most important thing for you to do at this stage is to position your work in relation to recent, quality publications. Toward this end, you should obtain copies of the two (or more) most recent proceedings of the following conferences:

PLDI (Programming Language Design and Implementation)
POPL (Principles of Programming Langauges)
Symposium on Compiler Construction

Read the table of contents of each and make a note of any papers that are directly relevant to your work. Read the abstracts of as many papers as you can. Find out what are considered interesting problems, and what a publishable unit of work looks like. (Some people suggest that you look at the future work section of the papers to get ideas for research projects, but my experience is that "future work" sections are full of junk that no one will ever do. If the authors really thought their future work would be a good project, they would be doing it.)

If you find a paper relevant to your project, look the authors up in the WWW and find out what they are working on now. Consider contacting them by email, if you have questions about their work, or you want their opinion about what you are planning. Web crawlers like Inktomi are often useful for finding people's homes pages. Also, Prof. Graham knows everyone in the world; an introduction from her might make it less awkward to contact someone (especially if that someone is tenured).

One last suggestion: design your project the way you would design any scientific experiment. Identify the data you would like to find, design an experiment that will provide that data (or some approximation to it) and figure out what tools you will need and (at least roughly) how you will analyze the data once you have it. Avoid (1) building unnecessary infrastructure and (2) collecting mountains of data that are impossible to interpret.