

Stat 547Q : Final Project Guidelines

Release Date:	Fri, March 18, 2011
Abstract Due Date:	Mon, March 28, in class
Final Report Due Date:	Fri, April 22, 2011 at 11:59 PST

Overview

Final projects will entail original investigation involving either the application of an existing stochastic process to a new problem, or the development of a new statistical methodology based on stochastic processes. If you choose to do all three projects, you will also have the option of doing a literature review instead (see next page).

Scope

As a broad target, single-student final projects should involve approximately as much work as two homework assignments. For groups of more than one person, the total work should scale roughly linearly with the group size, and be distributed roughly equally. Similarly, multi-purpose projects which are being submitted for multiple classes should scale with the number of classes involved. An ambitious, well-done project from a group of two or more (or shared between two or more classes) should be on the order of a conference paper. I encourage you to tackle large problems in groups, for multiple classes, or both.

Grading and milestones

The abstract is just a short paragraph telling me who is in your group, describing the problem you've chosen, sketching the general approach you intend to take, and stating the kinds of data you're using. If you haven't already spoken to me about project ideas, you may want to stop by my office hours or to make an appointment before this point. The abstract mainly serves to give me a chance

to make sure you're on a good path and to help me get a sense of who is doing what. Abstracts can be sent to me by email with subject "Stat 547 Abstract".

I encourage you to send me an update in early April that contains a preliminary result. An important skill in research is to be able to tell in a week or two whether your ideas are basically going to work, well before you've fully done all engineering and experiments. Updates are not required, but if you send me something, I'll send you feedback.

The final write-up should be on the order of 6-8 pages, describing your approach, results, data analysis, and so on. The initial abstract is a required checkpoint, but you will only receive a grade at the end, based on your final write-ups. Under normal circumstances, all group members will receive the same grade for the final project. Final reports can be sent to me by email with subject "Stat 547 Final Report".

Ideas

You are welcome to come up with your own topics—some of you already may have done so. You are also welcome to come by my office hours to get ideas from me.

Literature review as an alternative

If you choose to do all three projects, you will also have the option of doing a literature review instead of a project, summarizing and comparing 3-5 papers on an advanced topic. If you are interested in this option, I'll help you pick a good set of papers. Literature reviews are to be done solo.