Proposal Guidelines

CS97

Fall 2015

Your project proposal should be 1-2 pages, typeset in LaTeX, with 10pt font and margins set with the command `\usepackage{fullpage}`. Think of the proposal as a more detailed version of reaction notes for your core paper with some additional sections. In particular, your proposal should contain the following parts:

Key research problem This section identifies the core topic of your project. The research problem could simply be a restated version of the key research question answered by your core paper or a novel problem formulation based on your core paper. Also identify if your project is *theoretical*, *simulation-based*, or a combination of the two.

Key contributions In the previous section, you specified your core research problem. In this section, you will situate the research problem in the larger research context. In particular, you will identify the following:

   Significance You should state why the problem is significant to the field at large. Do not worry about related works yet. Your goal is to give the reader a sense of what is driving your curiosity in exploring this topic in general, and your problem in particular.

   Replication What were the key results that the authors claim to have achieved in your core paper and which of these are of particular interest to you? Which are the parts of the paper that you plan to replicate? Also include a basic timeline here with an itemized list of intended tasks. This will necessarily be a rough timeline. There is an example of the long-term timeline in Table 1.

   Extensions (optional) If you have already identified extensions that you would want to work on, list these out in detail (include what the extension is, why it would be useful to do, and how you plan to go about doing it). It is perfectly fine to hypothesize here a bit, and include a couple of possible directions.

Next Steps Throughout the time you work on the project, you will identify *weekly goals*. In this section, you will identify the next steps you need to take to make progress on your project and a deadline by which you plan to complete them. You should plan out, in detail, the next 2-3 weeks after the proposal is due. We will use lab times to check in on progress towards your self-prescribed goals and deadlines. An example set of immediate goals is listed in Table 2.

We will use lab time on Monday, 10/26 to check in on the progress of your project proposal.

Timeline	Task
Weeks 8-9	**Background**: Detailed plan in Table 2.
Weeks 10-11	**Implementation**: Implement experiment. Related work review. Submit progress report.
Weeks 12-14	**Write-up**: Analyze data. Write paper. Prepare presentation.

Table 1: Long-term Plan

Timeline	Task
Nov 9	Read paper and work out specific example for Theorem X.
	Download and play around with data sets.
Nov 16	Understand background and identify data sources for experiment setup in Section Y.
	Implement basic functionality for Z.

Table 2: Plan for the next two weeks