

CMPSC 580
Topics and Research Methods in Computer Science
Spring 2015

Assignment 22
Ideas for a Senior Thesis Proposal
Part 1 due 9 April 2015
Part 2 due 10 April 2015

Introduction

Due to schedule constraints brought on, at least in part, by the recent Gator Day during which we did not have class, I have slightly adjusted the schedule for module four. For this final module of the course, you will not be asked to complete the paper review or conceptual skills assignments, instead focusing on preparing for a senior thesis proposal related to this module's theme.

Part 1: Five Ideas

Create a short \LaTeX document listing (at least) five possible senior thesis ideas that are related in some way to the topic of graphics and information visualization. For each idea, come up with a proposed thesis title and a one- or two-sentence hypothesis/thesis statement, along with a description of your evaluation metrics and a short overview of the system that you plan to implement. Hand in a hard copy of this list at the beginning of Thursday morning's class (you might want to keep a copy to refer to during our discussion). Make sure you keep it in your Git repository.

These do *not* have to be “tightly coupled” to the subject of computer graphics systems that perform integrated modeling or overlay detection. They do *not* have to be of the form “A new data visualization that handles . . .” or “A novel empirical study of visualization effectiveness . . .” Yet, there should be a clear connection between your proposed idea and the topic of this module.

It would be ideal if you come up with ideas that are personally of interest to you, but that is not an absolute requirement. Just try to propose feasible ideas; even if you are not interested in carrying out such a project, perhaps someone else in the class might find your idea worth pursuing.

During a session that a student will chair, we will discuss these ideas in class. Be prepared to provide further information about your ideas during this in-class discussion.

Part 2: Lightning Talk and Slides

For Friday afternoon, prepare a “lightning talk”, lasting about 3–5 minutes, together with several accompanying Beamer slides, in which you expand upon an idea for a senior thesis related in some way to graphics and visualization. In advance of Friday's session, please practice your talk to ensure that you can complete it in no more than five minutes; you should review your proposed topic so that you are ready to answer several questions about how you will pursue it for your senior thesis.

In addition to placing the \LaTeX source code of your slides in your Git repository, you must submit signed and printed copies of your slides at the beginning of Friday's class. Students who would like to complete sophisticated Beamer slides should search online for tutorials about creating their own “inner”, “outer”, and “color” themes. If you would like to apply existing styles to your slides, then please visit http://deic.uab.es/~iblanes/beamer_gallery/ for many examples.