CSC 661 Digital Media

Spring 2013

Professor Burg

Semester Assignment for Graduate Students:

Graduate Thesis Research Question or Graduate Project Description

Each graduate student is asked to do one of the two options below: either develop a topic for a graduate thesis or develop an idea for a graduate project.

This assignment is an exercise in *the groundwork of identifying a good topic* for a graduate thesis or project. Finding your topic is often half the battle in developing a thesis, graduate project, or dissertation.

You are not expected to pursue this topic for your graduate thesis or project. The exercise is to give you practice in finding and doing the groundwork for a thesis or project.

The difference between a graduate thesis and a graduate project is that the thesis involves more background research, writing, and formal analysis while a project involves more implementation and empirical analysis.

The options are described in the following two pages.

Proposal of a Graduate Thesis Research Question

with Annotated Bibliography

If you choose this option, the steps for its completion are these:

* Identify a topic appropriate for a graduate thesis. The topic must be related to digital imaging or digital sound processing. Describe this topic in one paragraph and submit it by February 11. Include in your paragraph an explanation of the significance of your topic.
* Meet with Dr. Burg to discuss the topic. The topic must be approved before you begin your research.
* After the topic is approved, find sources appropriate to the project. Published academic papers and sections of books are appropriate.
* Create an annotated bibliography of at least seven sources appropriate for this topic. Use Chicago style for the bibliography. Proper format for your bibliography can be done using Zotero, a browser plug-in. See Dr. Burg if you need help with this.
* Meet with Dr. Burg to discuss one of the sources – presumably the most relevant one – in detail, to show that you have read and understood the paper.
* Based on your research, rewrite your original proposal topic. Submit the revised topic and annotated bibliography by April 1.
* Discuss your revised topic and annotated bibliography with Dr. Burg.

Unlike a dissertation topic, a thesis topic doesn't necessary have to lead to completely new research results – something never done before. However, an appropriate thesis topic should have some element of originality to it. If it is something that has been done before, you need to add your own twist to it – for example, a new way to analyze or implement the idea.

An annotated bibliography has, for each source, a paragraph or two that describes the information contained in the source. You should write this in your own words. Your annotated bibliography should show that you've read the sources listed and have an understanding of their content and relevance to your topic.

Proposal for a Graduate Project

with Prototype Initial Implementation

If you choose this option, the steps for its completion are these:

* Identify an idea appropriate for a graduate project. The idea must be related to digital imaging or digital sound processing, and it should be focused on implementation and empirical analysis of the implementation. Describe this idea in one paragraph and submit it by February 11. Include in your paragraph an explanation of the significance of your idea.
* Meet with Dr. Burg to discuss the idea. The idea must be approved before you proceed.
* After the idea is approved, find sources appropriate to the project. The sources should help you figure out how to implement your idea. These sources will be of a more practical nature than sources for a thesis.
* Meet with Dr. Burg to discuss one of the sources and how you're going to proceed with the prototype implementation.
* Submit the prototype implementation by April 1 along with an analysis of
  + what remains to be done
  + what could be done better in a more refined implementation
  + what empirical analysis could be done on a complete implementation
* Meet with Dr. Burg to discuss the prototype. Based on feedback from Dr. Burg, determine if the prototype is sufficient or if more work needs to be done.