

## Thesis Introduction

**Due dates:** draft: October 22, in-class; final: October 29, in-class

### Assignment

The first writing assignment in the course is to write a thesis introduction.

### Content

Each of you will write a short, no more than 3-4 pages, document that could serve as the **Introduction** section for your thesis.

We distinguish between those in the class who are well under way in their project and those who have not finalized their thesis topic (and, perhaps, have not even selected an advisor).

### For Students Whose Thesis Work is Under Way

If your thesis topic is finalized and you know enough about your on-going and future work to feel comfortable describing it, then you are essentially writing an Introduction to it. Please include the following in your document (not necessarily in the order listed below):

- A concise but clear description of the problem you are solving.
- The context in which you consider your problem.
- Motivation for your specific problem/solution.
- The (intellectual) contributions of your thesis.
- The (expected) results of your work.
- The bibliography of all sources cited in the introduction.

## For Students Whose Thesis Work has Not Started

Since you do not have a specific topic in mind, your goal is somewhat less structured, and is slightly "make believe". You will pick one specific research area. Your document will describe it in detail and argue why it is important. You will also select a single problem from the research area you are describing, and will pretend that your thesis addresses this problem. (Please be reasonable when selecting a problem. You need to make it look appropriate for a single M.S. thesis. So, wanting to solve P vs. NP, is not going to work.)

Your document should provide:

- A brief overview of the research area in which you plan doing your research.
- Motivation for the problem you selected.
- Description of the problem you want to study.
- Bibliography of any sources cited in your document.

## For Everyone

Your document should convey (or make a serious effort to convey) the following:

- The research area you are describing is important.
- The problem you are working/will be working on is (a) open and (b) interesting/important. It naturally follows from the state of the art in your area.
- Your (expected) intellectual contribution is significant.

You are expected to validate your statements about the importance of the work you are conducting by citing academic and non-academic (where appropriate) resources. The bibliography at the end of your document should contain the list of all sources cited in the document (if you feel that some uncited sources need to be there as well at this point, feel free to add them).

## Timeline and Deliverables

This assignment has two deliverables: an interim document and the final document.

**By Wednesday, October 22** write a draft document. The draft is allowed to be shorter than the final version. It does not require the same level of detail as the eventual submission. Essentially, the draft is an extended abstract of your putative thesis Introduction section.

**By Wednesday, October 29**, complete the introduction.

Note also, that **October 29** is the day for short presentations of your thesis topics. This assignment should be treated as offering some extra help with your presentation preparation: the 5-min short presentation serves the same purpose as the thesis Introduction section as the teaser for the "upcoming attractions."

**Deliverables.** All submissions for this assignment shall be via the **course GitHub wiki**. If you have not done so, create a wiki page for your thesis-related writings. For the draft submission you may simply create a wiki page and link to it. The final submission must be a PDF document (although you are allowed to post it in other formats **in addition to PDF**) attached to your personal wiki page.