

COMS 6998-7, Spring 2010  
Statistical Methods for NLP

Project Information

Key Dates :

Feb 23, 2010 (11:59pm) : Project Proposal  
March 25, 2010 (11:59pm) : Project Intermediate Report  
April 20, 2010 (4pm) : Final Projects Due  
April 27, 2010 (4pm) : Class Presentations for the project

Final Project:

Final project should give you an exciting opportunity to explore a problem of your interest in Natural Language Processing and/or Machine Learning. The research problem you are addressing can be theoretical research question or an applied problem in NLP or some combination of both. Your project cannot be just a programming exercise. The project has to have a clear research question that is being explored. You should be able to justify the proposed solution in your final report. The project is meant for you to have a learning experience where you are able to pursue a research topic of your choice in depth.

Project Proposal

Project proposal should discuss the research problem you are addressing in detail. You should show that you have done some literature review pertinent to the research problem. You should discuss the topics related for the project. Some of these topics could be learning algorithms, data/corpus, annotation/labeling, evaluation method, etc. You can also discuss why your project is original and interesting.

Length: Roughly 1 page

Intermediate Results

Intermediate Results is to help you guide through the steps of your project and give us an idea about the state of your project. You should clearly state the research question and your proposed solution. You should describe the corpora you are using for the project and the kinds of processing you have done it. If you are using any tools you should describe them as well. You should state the intermediate results you have obtained so far. If the research problem you are exploring makes it difficult to produce intermediate results you should discuss why this is the case in detail. You should also provide the rough plan of how you are going to pursue rest of the project.

Please provide a link to your project directory where we can see your intermediate results, processed corpora and any other related items that will help us understand your progress in the project.

Length: Roughly 1 page

### Final Project Report

Final project report should be a conference style 8-page paper. The paper template you should use can be downloaded from ACL 2010 website at <http://acl2010.org/authors.html>. You can use either latex or word document templates. In your report you should describe the problem, discuss related work, theory of your solution, implementation issues, experiments, results, discussion and critical analysis of your work. I would like to stress the fact that critical analysis of others and your work is essential in any successful research endeavor. Hence, you should think about why your solution is better, why some techniques work while some does not, why your research problem could be interesting to others, how can you improve on your solutions, how does it compare with the most recent related work, etc.

You can take a look at ACL or NIPS website for ideas.

<http://aclweb.org/anthology-new/>

<http://nips.cc/Conferences/>

### Final Project Presentation

The final project presentation will be held on the last day of classes. Each student will be given 8 minute for presentations and 2 minute for questions. The presentations will be strictly timed. The student is free to pursue any style of presentations.

### Grading

Grading will be based on the following criteria

Clarity of the problem description  
Originality of the proposed solution  
Literature review  
Description of implementation  
Discussions of your experimental results  
Critical Analysis of your work

Project Proposal (5%)  
Project Intermediate Report (10%)  
Final Projects Due (60%)  
Class Presentations for the project (25%)