

COMS 3101 - Fall 2013

Final Project

Project Description:

1. Your final project consists of two parts: 1-2 page write-up (pdf format) describing your problem, and your code (implementation).
2. Please see submission instructions and due dates on the course website.
3. You may choose to work on any problem you wish. It can be an original problem, or a well known one. You can find some suggestions below.
4. The amount of work you should do on your project (the implementation part) is roughly equivalent to the work you did on the last two HWs (#3,4).
5. The write-up should include three sections:
 - a. Problem summary: a detailed description of your problem.
 - b. Solution approach: your approach for solving the problem.
 - c. PERL functionality: a list of functions/structures/aspects of perl you intend to use. If applicable, include a list of CPAN libraries/modules you are using. It is sufficient to mention only the major/interesting components.
6. If your problem requires any input files/data or creates data, you should include these files (example input/output) in your submission along with your code.
7. You may use code from outside sources (see link on the website) as long as you acknowledge this clearly in your write-up.
8. Make sure to document your code properly.

Project Ideas:

This is a short list of ideas you can consider for your project:

1. *Collect and Process Textual Information*: implement a tool that collects information from the web (articles, reports), analyzes the obtained data and produces a summary/report.

2. *Analyze Specific Data:* consider a very specific dataset (e.g. news articles on a particular topic, science reports), implement a routine that answers a set of pre-determined questions about the dataset.
3. *Implement an Algorithm:* choose any interesting algorithm (machine learning, NLP, graph-theory) and implement it. Verify that your code works by supplying artificial data.
4. *NLP Application:* natural language processing is a field concerned with deriving meaning from natural language (text). Choose any of the well known tasks in NLP (there is a good summary on Wikipedia) and solve a particular “toy” problem.