Dates:

Project proposal report: 2/10

Project progress report: 3/28

Project final report: 4/25

1:

Choose either of the projects: application flavor, implementation flavor, research flavor

Application flavor projects:

* Select 3 different dataset/ 1 if it creates its own dataset
* 3 different machine learning methods that can be used for the selected problem. (Can not use knn, decision tree, linear regression) need to be more complex.
* See how the results changes through changing the size of the data set

Implementation flavor projects:

* Select one publish paper from the ML journal or conferences published after 2015.
* Implement the core algorithm and system specified in the paper

Research flavor projects:

* Students identify an interest and nontrivial machine learning problem
* Develop novel solutions for the problem.
* Test the proposed solution on a selected dataset

Project proposal (10%) 1-2 pages long:

1. Project Type
2. The problem your project will address
3. Project goal and motivation
4. The rough methodology and plan for your project
5. Datasets that you are planning to use for your experiment
6. The resource needed to carry out your projects
7. The workload distribution for group member

Status Report (10%):

* 1 – 2 pages long, should contain enough implementation, data, and analysis to show that were on the right track.

Following items are expected in the report:

1. Clear and specific problem you want to solve
2. The basic goal of the project
3. Your assumptions and methods
4. Your software/tools/data sets used in the project
5. The detailed plan of experimental studies you want to perform
6. Your current status and partial results
7. Brief plan for the remaining month.

4. Final project presentation (20%):

You will have a presentation explaining your problem statement, dataset, methods, analysis, and results. The presentation should include all the sections in the final report

5.Final report and source code (60%):

- The final report should extend the previous writeups into a conference style with 5 to 10 pages

- Report should include:

1: Present the problem statements and summarize your contribution in the first section.

2: Include a detailed description of your algorithm, analysis, implementation in the technical session.

3: Describe the evaluation methodology and significant result in the evaluation section.

4: Specify a hyperlink through which people can download your source code, software and data set for reproducing your experimental results.

Software source code submission:

1: Provide your complete source code, dataset and runnable software in one package.

2: May provide a link to Dropbox, GitHub etc...

3: Please include a read me file specifying how to install and run your software and all the experiments