

# CS 383 Machine Learning

## Final Project Guidelines

There are three components to your final project:

1. Video Presentation
2. Paper
3. Source code (data available on demand)

To help clarify my expectations for each, here are some guidelines.

### I: Presentation

The presentation will be due during finals week. Each presentation should last about 10 minutes.

Your slide deck should include at least (basically following the sections of your paper):

1. What is the problem you are tackling?
2. What related work is out there (and therefore which paper(s) are you basing your approach off of)
3. What is the basic approach?
4. Where are you getting your data from and what does it look like?
5. What are your results and observations?
6. What could be future extensions of your work?

Please focus your presentation on the experiments and results, as we should already have an idea of the project from the midterm presentations.

### II: Paper

Your paper should be 3 pages for singles, 4-5 pages for groups. It should contain the following sections.

1. Abstract
2. Background
3. Related Work
4. Methodology - various sections explaining what you did including all the applicable mathematics that would allow someone to recreate your work
5. Experiments and Results
  - a. Including information about your data
  - b. Applicable figures (PR curves, etc...)

- c. Applicable tables/statistics
- 6. Conclusions
- 7. Future Work/Extensions
- 8. Bibliography

### III: Source Code and Data

Although you are not required to submit your data (since it may be large), you must submit your source-code to verify authenticity. As a rule of thumb, your results (as shown in the evaluation section of your paper) should be reproducible. If I have any questions/issues on what I see (in the paper and/or code) then I may ask you to demonstrate how to run your code (with its related data).

### IV: Submission

In all you should be submitting:

1. Presentation Slides
2. Presentation video
3. PDF paper
4. README file for code
  - a. How to link, compile, etc..
  - b. Additional libraries needed, how to install them, etc..
  - c. What (and how) to run to reproduce the results in your paper.
5. Source code

### V: Grading Rubric

Your grade will be based on three components:

1. Subjective opinion on quality (100pts)
2. Presentation Quality (100pts)
3. Paper Quality (200pts)

*My subjective point allocation will be:*

100pts - Amazing (may not be any of these)

Novel and ready to go to a conference

95pts - Excellent

Lots of work, extensive evaluation. Didn't leave me with any questions.

90pts- Very good

Good amount of work good evaluation but left some questions.

85pts - Good

Good evaluation but not a lot of work and/or lots of questions.

80pts - Decent

Lacking some "depth"

75pts - Some major issues

I.e No eval, missing sections, too vague/incomplete, missing data, files, code

70pts - Major issues

Several of the above issues

50pts - Barely did anything

0pts - Didn't do anything

*Presentation Points will be allocated as*

- |  |       |
|--|-------|
| 1. Presentation has all necessary components         | 60pts |
| 2. Presentation address all major questions/concerns | 20pts |
| 3. Presentation is well put together                 | 20pts |

*Paper Points will be allocated as:*

- |  |       |
|--|-------|
| 1. Abstract  | 10pts |
| 2. Background  | 10pts |
| 3. Related Work/Bibliography                             | 20pts |
| 4. Methodology   | 30pts |
| 5. Experiments and Results                               | 30pts |
| 6. Conclusions   | 30pts |
| 7. Future Work   | 10pts |
| 8. Overall Analysis                                      | 30pts |
| 9. Proper Submission with reproducible and original code | 30pts |