

Title

Your Name

Date

On my honor as a University of Colorado at Boulder student, I have neither given nor received unauthorized assistance on this work.

*Note regarding unauthorized assistance: I would prefer that you learn as much about Machine Learning as possible throughout your project. Therefore, I encourage you to talk to whoever is willing to talk to you about your project. Feel free to involve collaborators somewhat deeply, but in order to learn, you will of course need to do a significant amount of work yourself. I expect all written assignments to be your own work and reflect **your** understanding of that work. That said, your paper should reflect feedback from your class peer group as well as from me.*

Introduction

What is the problem you are addressing?

Who cares?

Why do they care?

What do you know about previous attempts to solve it? List key publications that you are aware of.

What have previous results been?

Data

Conceptually, what is the data and what are the classes?

Is the data already annotated with class labels?

What is the class distribution?

Where will you get the data?

How much data will you need/use?

What are the key details regarding the data?

What attributes/features do you *plan* to use initially?

Have these features already been extracted?

General Approach to Solving the Problem

What is your *planned* high-level approach to solving the problem?

What specifically will your algorithm be learning?

Will you use semi-supervised, supervised, unsupervised, active or other learning?

What algorithms do you plan to utilize, enhance, evaluate, etc?

Experimental Design

What experiments do you *plan* to run?

How do you intend to ensure the integrity of your results?

(Will this convince those who care that your results are sound?)

Evaluation

How will you know if you were successful? How do you plan to evaluate your solution?

How has prior work evaluated similar problems and solutions?

(Will this convince those who care that you were successful?)

Workplan

What is your schedule of work consistent with course project due dates?

Risk Mitigation Plan

What risks have the potential to result in an unsuccessful project?

How will you mitigate those risks?

Is there anything else you think I should know about the project?

Summary

Summary...

At the end of this project, what will you have learned about Machine Learning?

Is that what you wanted to learn? If not, why this project?

What is this project's contribution to the field of Machine Learning?

(If you are working toward a dissertation, what is the relation between this project and your dissertation? If none, why this project?)