Machine Learning Final Project

Machine Learning can be applied to solve problems that were never possible before across many industries today. This is due to advancement in electronic data capturing and recording tools such as high-speed cameras, sensors, cost-effective data storage systems, and many more. The goal of this project is to apply what you have learned in this class to solve some problems that excite you.

Teams

Each team must have a minimum of **TWO** students and at most **THREE** students. All members of the group will receive the same grade, except for the member(s) who contributes the least / inactive. The inactive member will receive a penalty of 25% of the project grade. An anonymous survey will be sent out the day after our last meeting where students can share their team experiences.

Timeline

1. A roster of your group members must be submitted by **Friday, March 31, 11:59PM**
2. A proposal of your intended project is due by **Monday, April 10th, 11:59PM**
3. Project update - should provide more details than the proposal. Due by **Monday, April 24th, 11:59PM**
4. Presentation - **Friday, May 12th** - We can agree to do this over zoom or in-person.
5. Code, final report, and datasets due by **Friday, May 12th, 11:59PM**

Proposal (No more than 2 pages)

1. Names of collaborators
2. Title for the project
3. A brief description of the problem your team is trying to solve. What industry does this problem belong to? What is the general problem this research is trying to study? What are some approaches currently being taken to solve this problem? What is so interesting or innovative about this approach?
4. Description of the data sets. Including the source so I can find it
5. What are some machine learning techniques you think your team can try?

Final Report (3-4 pages)

1. Introduction - This should relay what your team is attempting to accomplish.
2. Methodology - This should talk about the data set, data preprocessing, baseline, model description, implementation, and computational requirements.
3. References to any research papers used

Presentation (5-10 Minutes)

1. Discuss motivation, methodology, and results. Include good visuals