Course: DS – 630 Machine Learning

Course Project Description

Frame a business problem, select one data set, clean the data, run preliminary analysis of your data, and select two machine learning algorithms that you have studied in class. Note that you should pick the algorithm that you think that fit the problem/data set, and have potential to be good models to solve the problem that you are studying. Summarize your analysis and findings in a project report.

Project team

You can work individually or with a partner

Project schedule

- Form a team and select data (possible data sources are in lec2_endtoendMLproject.pptx), have a project plan, and submit proposal by the end of Week 6 (11:59pm EST) (worth 10% of project grade)
- Final project presentation (Week 10, presentation 10-15 min for each team. worth 30% of project grade)
- Final project report (end of Week 10, 11:59pm EST, worth 60% of project grade)

Project proposal

Half a page project proposal to describe the data you selected and solutions you may be taken.

Project report

Feel free to explain the business problems you are trying to solve in your project final report. The front page of your report should include a summary of what you have done and key findings. Explain the datasets you selected, run machine learning algorithms and explain your findings. Clearly present the findings in your project final report in a succinct manner. A five to seven page report should be sufficient. Attach code or relevant materials as needed (does not count toward the total # of pages).

It will be great if some of the following questions/issues will be addressed (follow steps that you learned in lec2_endtoendMLproject.pptx and experience of working through each algorithm that we learned this semester):

- Analysis of the business problem.
- The methodology you used.
- Details of the methodology.
- The findings from the project.
- Are they different from your initial expectation? If so, is there a suitable explanation?
- Any plan for future work if more time/resources available?