**Final Group Project**

Please choose one from the following two data sets:

1. online\_shoppers\_intention.csv. The goal is to predict the variable "revenue". A detailed description of the data is in the UCI website.

https://archive.ics.uci.edu/ml/datasets/Online+Shoppers+Purchasing+Intention+Dataset

In this website, you can find some reference paper, where the authors used some ML methods. It is possible for you to use something similar and reproduce their results as a benchmark. You can also try some other methods and compare with the benchmark.

1. COVID.xlsx. The goal is to study how COVID-19 affects global economy. There are two response variables “GDPCAP” and “HDI”. The data are from the following recent paper.

<http://www.conscientiabeam.com/journal/29/abstract/6248>

You may want to read the paper first to know more about the data and the research question. For this dataset, please provide some interpretations of your final results. Similarly, you can compare with the method and the results in the above paper.

Please use the machine learning methods to address the problem and justify your models/ methods (e.g., compare different methods).

Format: Report should be submitted in a pdf file by **May 14 at 9pm via Canvas**. Report that is late receives 20% off within 24 hours late and 0 after that. The report has no more than 8 pages in normal format with font size 12. All the statistical analysis should be done in R. The R programs used for data analysis should be turned in together with the report (programs not counted into the 8 page limit).

Since this is a group project, please make sure you and your teammates are assigned in the same group on Canvas. Ideally, all group members should contribute equally in the project. In general, I will give the same grade to all group members. When submitting the report, please upload the file via Canvas. Please try the submission option before the deadline in case there are some technical problems. The deadline is a hard deadline and there is no extension. If you encounter some technical problems in submission, you can email your report to me but it must be before the deadline. Please make sure the names of the all group members and the NetID are printed clearly on the first page of the report.

Note on the peer evaluation

If someone in your group make very little contribution to the group project, you may send me a short peer evaluation by email after you submit the project (such as what part of the project is done by you and your teammates). I will look at the peer evaluations from all the students in your group and may give different grade. If you agree that you have roughly equal contribution to the project, you don’t need to send the peer evaluation to me. In this case, I give equal grade.