STATS 780/CSE 780, Winter Semester 2018

ASSIGNMENT 3

Submit directly to Prof. Sharon McNicholas. Due at 2.30pm on Wednesday, February 14, 2018.

Your assignment must conform to the Assignment Standards listed below.

Assignments submitted up to 24 hours late will incur a 30% penalty. Assignments submitted more than 24 hours late will receive a zero grade.

Find a data set that is suitable as a topic of a regression tree or classification tree analysis; you may <u>not</u> use a data set that was discussed in class on January 31 or February 7, 2018. Briefly describe your chosen data set and clearly explain where it was sourced. Carry out a thorough analysis of your chosen data set. Your analysis must include bagging, random forests, and boosting. Provide a clear and concise description of the results. Clearly state what conclusions can be drawn from your analysis — these conclusions should be cast in the context of your chosen data set.

Assignment Standards

- LATEX is strongly recommended but not strictly required.
- Eleven-point font (times or similar) must be used with 1.5 line spacing and margins of at least 1 inch all around.
- Your report may not exceed three pages, inclusive of tables, figures, and bibliography.
- Do not include a title page. The title and your name should be printed at the top of the first of the three pages.
- Assignments must be submitted in hard copy, using **two-sided printing** (i.e., printing on both sides of the page), so that only two pieces of paper should be submitted.
- The writing and referencing should be appropriate to the graduate level.
- Various tools, including publicly available internet tools, may be used by the instructor to check the originality of submitted work.