CSc 496, Fall 2024: Semester Project

Due dates:

- Thursday, Sepemember 12th (project selection)
- Tuesday/Thursday, Sepemember 17th/19th (first presentation)
- Tuesday/Thursday, October 17th/19th (check-in with me)
- Tuesday/Thursday, November 8th/10th (second presentation and check-in)
- Tuesday, December 10th, 2024 (written report)

No late components will be accepted.

This document describes the semester-long project for this course. Please read it carefully. Please note that the project is worth 40% in total and is broken down as described in this document.

The first step is to choose a project that I will accept. This will likely involve back-and-forth with me over email and/or in office hours. You may choose a project in *any* area of sports analytics (including in sports that we do not cover in class). In order for me to accept a project, you must convince me of the following:

- The project represents a substantial amount of effort. In my other courses, the sum total of programming assignments are worth around 40% of the grade, and while effort depends on both programming skill of a particular student (as well as luck [e.g., does one run into an unfortunate, hard to resolve bug?]), I would estimate that students spend 50-100 hours on the programming assignments (as a whole).
- The project contains a significant amount of programming and analysis. Note that the programming can be, of course, assisted by AI tools.
- The project proposal poses a clear statistical question.
- The project proposal makes clear how you will know if you succeeded.

This part is not graded. However, you will not be allowed to proceed to the first milestone (which is the first presentation)—and *is* graded—until I have approved your project.

The second step is presenting your project. This part is worth 5% of the total course grade. Following are the guidelines:

- You must discuss the statistical question and evaluation (described above), and additionally, how you plan to attack the problem.
- You must practice the presentation in front of two classmates. This will work as follows: (1) I will assign (randomly) the two students to listen to each presentation. (2) You must send them a link to a recorded version of you presentation. (3) The two students must provide constructive feedback. (4) You must revise your presentation based on the feedback and then practice it again in front of both students, live over Zoom. (5) The two students will again provide constructive feedback, and you must again revise accordingly.

- The presentation will be eight minutes, with an additional two minutes for questions.
- You must use a slide presentation tool (e.g., Powerpoint, Keynote, etc.).
- You must email the presentation to me no later than 7:30am on your presentation day.

Which date you are assigned will be randomly selected; students who present the first day will present the second day for the November presentation. *All* students must evaluate every student's proposal with a least a short paragraph. This feedback should be emailed to the student, cc'ing me. All feedback must be constructive.

The third step is doing a check-in with me, also with 5% of the course grade. This will be over Zoom; I will provide blocks of times later. It will last 15 minutes, and you will discuss the current status of your project. You have to have made tangible progress on your project in order to be awarded the entire 5%. You will show me the code your have written, the analysis you have developed, or any other items relevent to progress.

The fourth step is presenting your project. This part is worth 5% of the total grade, and the ground rules are the same as for the first presentation. Additionally, you will do a check-in with me.

The last step is submitting the written report, which you will do on lectura using the `turnin` command; for this, use the project name `csc496-f24-project`. Please submit your report and all code. This part of the project is worth 25% of the course grade.