CS 422: Data Mining

Department of Computer Science Illinois Institute of Technology Vijay K. Gurbani, Ph.D.

Fall 2022: Homework 0 (10 points) (Does not contribute to homework portion of the grade)

Due date: Friday, September 02, 2022, 11:59:59 PM Chicago time.

1 Exercises

1.1 Describe in 2-3 sentences what you expect to achieve from this course. Add this description as a PDF file into the archive that you will upload.

2 Practicum problems

2.1 Problem 1

This exercise will ensure that you are comfortable with the mechanics of creating R notebooks and submitting the html from the notebook to Blackboard.

In the Homework 0 page on Blackboard, you will see a file called Template.Rmd. Use this file as a template for all your homeworks. Copy (or rename) this file to a new R notebook called vijay-gurbani.Rmd. (Your .Rmd file will use your *firstname-lastname*, of course.)

The first few lines of the notebook should be as follows:

title: "CS 422"

output: html_notebook

toc: yes

toc_float: yes

author: Vijay K. Gurbani

- 1-A: Load the *cars* dataset and print it. The *cars* dataset is a built-in dataset in R. To access it, simply type "attach(cars)" from the R REPL in RStdio.
- 1-B: Plot the data in the *cars* dataset as a:
 - Scatterplot. Provide a title for the graph.
 - Line graph. Provide a title for the graph.
- 1-C: Print a summary of the *cars* dataset using the R summary() command.
- 1-D: What is the maximum speed and minimum distance as shown in the **summary()** command?