

# CS 422: Data Mining

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

## Fall 2021: Homework 0 (0 points; not graded)

**Due date: Tue, Sep 07, 2021 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 RStudio.

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?