CISC/CMPE 471 Proposal

Due: March 5th, 2021 at 5:00PM EST

1 Algorithm

Choose a problem from `http://rosalind.info/problems/tree-view/`.

For a group of three, choose a problem from the second-last row starting with `QRTD`.

For a group of two, choose a problem from the fourth-last row starting with `CUNR`.

For a group of one, choose a problem from the sixth-last row starting with `NWCK`.

2 Proposal

Your report grade will be based on grammar and spelling, presentation, clarity, and adherence to the instructions. Marks will be deducted for a lack of these items. A handy link for checking clarity is `http://hemingwayapp.com/`. Your proposal should be at most **two pages**, submitted as a single file PDF, with the following sections.

2.1 Introduction and Motivation

State your chosen algorithm. Explain the motivation of why you chose the algorithm you wanted to complete.

2.2 Research

1. Briefly explain the inputs and outputs of the algorithm. What is it's space and time complexity and why?
2. Explain what kind of experiments you would like to perform and why they would be important to know.
3. Hypothesize an addition to the algorithm for a specific use-case to improve it. I.e. make an assumption on the data, and show how you could extend the algorithm to perform better with that data.
4. Explain how you intend to visualize and summarize your findings? Graphs, tables, etc.. What kind of graphs? What would be important to show to prove your proposed addition is better than the baseline algorithm?

2.3 Resource Allocation

Explain who is going to be doing which parts of the project (i.e. algorithm X, algorithm Y, experiment X, writing report component X, etc...). Consider this a contract with your team members.