

# Class Scheduling Algorithm

## Overview of the problem

I am a student who also works 30 hrs a week. The hardest part of picking classes every term is minimizing the commute time since time spent commuting is time I cannot spend on work or school. The problem I would be trying to solve would be basically input in all the possible classes I could be taking and then have the program solve for the best configuration of classes that minimizes commute time.

## Details

- This algorithm would use a Hill Climbing Search Artificial intelligence technique.
- The main heuristic would be minimizing the time in between classes so that the user only needs to commute a few times a week.
- We would have to determine how much time in between a class is enough to justify the commute vs staying and waiting for the next class
- Initially I would have the user input their commute time but future iterations if time permits it, we could calculate it dynamically.
- I would either find a way to scrape the Carleton class data into my app or have the user manually enter the details. Ideally I would find a way to automate this since this input would take a lot of time and defeat the purpose of making the course selection process easier.

