Simon Christian

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EDUCATION

Macaulay Honors College (Full 4-Year Undergraduate Merit Scholarship)
City University of New York, College of Staten Island
Bachelor of Science in Computer Science & Mathematics — Expected May 2023

Relevant Coursework:

Data Structures and Algorithms
C++ Programming
Operating Systems
Object Oriented Software Design
Digital Circuits Design
Web Applications & Database Design
Introduction to Data Science

Mathematics:

Discrete Mathematics & Structures
University Calculus I – III
Linear Algebra
Number Theory

Skills:

Programming:
C++, Python
HTML/PHP/CSS/MySQL
Technologies:
Visual Studio 2019, VSCode XCode, Sublime Text, Atom
Node.js
Git/GitHub
Libraries:
NumPy, Pandas, Sci-kit Learn

Misc:

MATLAB
LaTeX
Jupyter Notebook
Anaconda
AutoCAD/TinkerCAD/Solidworks
Microsoft Office Suite
Adobe Photoshop

PROJECTS

Small VI-Editor
Implemented basic data structures and concepts (pointers, smart pointers, node vs array implementations of stack, balanced binary search tree, dealt with file input and output etc.) into a VI editor with standard functionality- move cursor up (k), down (j), left (h) and right (l). In addition to, clear screen (cls), delete character (x), delete current line (dd), undo/redo last changes (u) as well as read and write/save and delete from a file provided by the user (w). Keywords were highlighted based on an input text file provided by user.

Queue Simulation
Implemented a queue to track the average wait-time of individuals entering a queue, this model takes in a few parameters such as simulation time, number of servers, average transaction time, and the average arrival time difference between customers in order to calculate the total waiting time, the number of customers served, customers that are still waiting to be served, the number of customers left in the queue as well as the average waiting time per customer. This simulation is useful for modeling a high-paced environment such as a public printer or busy restaurant.

Data Science Exploration
Used Kaggle to find and aggregate relevant data in order to analyze the correlation between university, prestige and respective income potential of graduates. Utilized Python, NumPy, Pandas and sci-kit learn library to run exploratory data analysis on datasets after cleaning and processing. Communicated results via a write up python notebook and shared with class.

ASSOCIATIONS & INTERESTS

Clubs & Activities: Institute of Electrical and Electronics Engineers (IEEE)
Association for Computing Machinery (ACM)
MHC++ (Macaulay Honors Coding++ Club Promotes Programming and Technical Skills)
Hack-A-Project Club (Club Allows Students to Congregate and Work on Self-Directed Projects)
Interests: Astronomy, Philosophy, Finance & Economics
Languages: English, Gujarati, Hindi