

Education

Rutgers University-New Brunswick. Bachelors in Computer Science, expected date of graduation - Dec 2024, GPA: 3.4

Projects

Donut Store Application

- Built two versions of a donut store application, created the backend in Java for both versions. One version utilized JavaFX for the front end, while the other utilized Android Studio.
- Collaborated within a group, following coding standards and design requirements, and performed unit testing, to ensure proper results.
- Implemented a menu system with five sections: a main menu for navigation, a donut menu for ordering with a running total, a coffee menu for coffee orders, a basket menu for viewing and editing order contents, and a store orders menu to place, manage, and export orders.

Portfolio Website - <http://shanportfolio.tech>

- Created a personal portfolio website using HTML, CSS, and JavaScript.
- Displays an "About Me" section that highlights my skills, education, and experience, a "Courses, and Objectives" section that lists the courses I have taken and the projects I am currently working on, a "Project Portfolio" section that showcases my projects with descriptions and links to their GitHub repositories, and a "Contact Me" section with a form for users to submit inquiries directly on the site.
- Contains links to my Github, LinkedIn and other social media as well as a downloadable CV.

Text File Compression

- Developed a text file compression program utilizing Huffman's algorithm, which reduced file size on average between 20%-50%.
- Constructed and modified a binary search tree that reflected all the characters in the input file, ordered by their frequency of occurrence. Designed and managed queues to form the Huffman Tree.
- Traversed the tree to create an array of "encodings" representing the characters used in the text file, which were used to both encode and decode the file.

Kindergarten Class Simulation

- Created a simulation for a kindergarten class, initially represented as a singly linked list. The simulation offered various features, including the ability to seat students in a 2D array based on availability, transfer them into a circular linked list for a game of musical chairs, facilitate the game, and reassign students to their original seats following the game's conclusion.
- Provided options to add or remove students from any of the data structures described.

Conway Game of Life

- Created an implementation of John Conway's Game of Life using Java. Allow users to input the size of the 2D grid board for the game, wrote methods that identify live cells and their neighbors, compute the grid's new generations according to the game's rules, and count the number of communities using union functions.

Work Experience

Staples of South Plainfield, NJ, **Retail Sales Technology Associate**, July 2022 - Aug 2022

- Offer customers basic tech assistance and suggestions for their personal computers, printers, and other devices. Advise customers on which computers, printers, and accessories would meet their needs if they needed any help, as well as inform them of in-store warranties and other paid services offered by us.

Accurate Diagnostics Labs in South Plainfield, NJ, **Specimen Processor**, Dec 2021 - Jan 2022

- Process COVID-19 tests into company systems during the peak of the pandemic. Collaborate with other employees to efficiently manage and safely store COVID-19 test samples while keeping up with the rapid influx of tests and positive cases in the tri-state area. Introduce patient data into company systems and update current patient data in our company systems.

Skills and Interests

Programming Languages/Frameworks: Java, Python, C, SQL, HTML, CSS, JavaScript, JavaFX, React, Node.js

Software + Skills: Microsoft Excel, Git, Adobe Photoshop, PC Building, Powershell, Eclipse IDE, Visual Studio Code, Unit Testing

Interests: Game development, artificial intelligence, machine learning, internet security, basketball, gaming, and investing