

Jai Malhi

EDUCATION

Software Systems, B.Sc. Simon Fraser University, Burnaby, BC Sept. 2021 – Present

- **Programming Coursework:** Algorithms and Data Structures, OOP design in Java and C++
- **Other Coursework:** Descriptive and inferential statistics, Chance phenomena and data analysis

SKILLS

Software: (*proficient*): C++, C, Java (*familiar*): Python, JavaScript, HTML/CSS, Git
Technologies.: React JS, Bootstrap, Ansible, Docker, Pandas, NumPy, Unix commands
Applications: VS-Code, IntelliJ, GitHub, MATLAB

SOFTWARE PROJECTS

Lead Developer Mutant Database Sept. 2022 – Dec. 2022

- Designed and implemented a database to store information about 'mutants' that allows users to add, delete, and view mutant information using a JavaFX GUI
- Created RESTful backend server enabling mutants to be stored locally in JSON files
- Devised interface for the frontend allowing users to add, delete, and view data through visual representations of mutant attributes like strength, weight, rank, etc.
- Utilized: Java language, JavaFX, Spring

Designer/Developer Quiz WebApp November 2022

- Developed a Trivia/Quiz Webapp using JavaScript that allows users to answer a variety of questions and save and compare individual scores
- Integrated the Open-Trivia Database using the Fetch API allowing the use of no local files to store questions
- Incorporated persistent data storage to store scores using local storage (browser)
- Utilized: JavaScript, CSS, HTML, Fetch API, Open Trivia DB

Lead Developer Pish Interpreter May. 2022 – Aug. 2022

- Implemented a Python-ish interpreter that takes in python like commands from a text-file or command line then parses and executes them
- Used a binary tree to hold keywords and operations, while using a hash table to store all user created variables
- Utilized: C++ language, Binary AVL trees, Hash tables

EMPLOYMENT

Personal Website: jaimalhi.ca

Software Developer Intern CaminoSoft Jan. 2022 – Sept. 2022
(<https://caminosoft.com>)

- Developed Data Science applications in Python using libraries like Pandas and NumPy
- Improved data parser (csv inputs) runtime by ~20% by utilizing the Pandas library's chunking capabilities while maintaining low memory usage
- Assisted in maintaining code style and efficiency of programs by refactoring code when necessary
- Designed and built infrastructure automation tool to deploy updates on client machines using Ansible

Stock Clerk Save-on-Foods Oct. 2018 – June. 2021

- Responsible for transferring and organizing stock inside the store
- Ordered and rotated stock, ensuring no products were expired and products with close expiries remain at the front
- Managed stock levels, kept aisles and coolers looking professional