Joey Shi

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https://joeyshi.tech/

Education

University of British Columbia
Mathematics & Computer Science
2018 – 2022
cGPA: 4.33 / 4.33
Science Scholar / Dean's Honour List

Technical Skills

Programming Languages
Python
Java
Javascript
C++
C
C#
Assembly

Libraries
Scikit-learn
Numpy
Matplotlib
Pygame
p5.js

Tools / Environments
Git
Unity
Android Studio
Jupyter Notebook
LaTex
MATLAB

Projects

Differential Equation Solver | Python
- Used finite difference methods and Numpy array manipulation to solve differential equations
- Implemented methods for recording and animating solutions
- Designed GUI with TkInter for inputting parameters

Image Compression with Binary Trees | C++, FTP, SSH
- Created hierarchical binary tree datatype to partition images based on colour variance
- Used binary tree pruning algorithm to compress images

Trivia Train | Java, Android Studio
- Requests and processes JSON data from an Open Trivia API
- Designed quiz class to distribute questions and compute score
- Implemented simplistic layouts and high score saving

Work Experience

University of British Columbia
Undergrad Academic Assistant | July 2020 – August 2020
- Coded WeBWorK questions in Perl for UBC calculus students

Earls
Line Cook | September 2016 – June 2018
- Cooked panfry dishes during evening shifts 3 times a week
- Portioned food and washed dishes and equipment

Hackathons

NWHacks
Bananos | Java, Android Studio
- Created grocery purchasing optimization tool by comparing item prices between selected stores
- Developed functions for parsing speech for item names and quantity