Gary Guo

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Summary of Qualifications

- Programming Languages: Java | Javascript | C | C++ | Python | OCaml | HTML | CSS | Git
- Languages Spoken: English (native) | Mandarin (native) | Spanish (intermediate)

Education

University of Washington | Seattle WA **Expected Graduation: June 2024**

- Bachelor of Science in Computer Engineering
- Relevant Coursework: Accelerated Computer Programming I/II, Data Structures and Parallelism, Hardware Software Interface, Systems Programming, Programming Languages, Machine Learning, Linear Algebra
- GPA: 3.85

Relevant Experience

Math Instructor I | Mathnasium of Woodinville **August 2018 - January 2022**

- Trained in the Mathnasium Method™ and creating customized learning plans according to students' needs
- Able to clearly explain a variety of math concepts to students from elementary to high school
- Proficient in group teaching and working with multiple students at a time
- Demonstrated strong communication and leadership skills with colleagues, students, and parents

Advanced Robotics at the University of Washington (ARUW) **January 2022 - Present**

- Member of the vision sub-team working on developing a new auto-aim implementation for different robots
- Implement an assortment of issues on gitlab using python and git

Additional Projects

Dub Hacks 2020 | 24 Hour Hackathon | Flipped Travel

- Worked with a team of five to create an interactive website allowing users to explore points of interest in their city or any location using a map interface
- Collaborated on front-end code while learning HTML and Javascript

Udemy Course Completion Certificate: The Complete Web Developer Course

- Learned JavaScript and HTML/CSS through a variety of projects and websites

YelpCamp - Javascript | NodeJS | Express | MongoDB & Mongoose

- Implemented a Yelp-like website for campsites allowing users to log in and CRUD operations on comments
- Used MongoDB for the database to store information about users and campsites

Java Projects | Swing GUI

- Tic-Tac-Toe Game
    - Utilized the minimax algorithm as the computer AI—uses recursive backtracking
- Matrix Calculator
    - Able to perform various matrix operations and ability to customize matrix dimensions
    - Efficiently utilizes layout managers, JPanels, JButtons, JSpinner, etc for appealing interface
- 2D Linear Transformation Visualizer
    - Display animation as coordinate plane undergoes linear transformation

File Search Shell | C++

- Given a query containing word(s) and directory(s), outputs files with the query and number of matches
- Uses self-developed HashTable, LinkedList, and various other classes to store information
- Utilizes C++ file I/O to to write data structures to disk and extract files from disk

Linear Regression Model for MNIST Image Classification | Python

- Implemented a ridge regression model using mean squared error loss and regularization to classify numbers between 1-10 from the MNIST dataset