Joshua Jusay

EDUCATION

University of California, San Diego - Mathematics – Computer Science B.S.   **Dec. 2020**

Relevant Courses: Object-Oriented Programming, Data Structures, Algorithms & System Analysis, Software Tools, Computer Organization & System Programming, Graph Theory, Theory of Computation

Current Courses: Advanced Data Structures, Cryptography

San Diego Miramar College - Pre-Engineering Studies A.S.   **May 2018**

San Diego Miramar College - Mathematics Studies A.A.   **May 2018**

WORK EXPERIENCE

Senior Tutor – San Diego Miramar College   **Jan 2016 – Present**

- Lead one–on–one tutoring for Java Programming
- Lead group study sessions and one-on-one tutoring in Mathematics from Algebra to Differential Equations
- Assisted students with campus resources and tutoring appointments

PROJECTS

Electric Vehicle Cost Optimization

- Designed and developed a program in Java which produces a graph with weighted edges that describe the costs of purchasing and charging an electric vehicle at various charging options.
- Utilizing an implementation of Dijkstra's algorithm with a priority queue
- Implementation finds the vehicle with lowest combination of purchase price and charging cost at given distances driven.

Portfolio Website

- Created a portfolio website to showcase skills, projects, and experience that utilized a template from GitHub and hosted on GitHub Pages.
- Employed HTML, CSS, and JavaScript in order to manipulate and customize template to desired UI.

N-Gram Viewer

- Developed an NGram Viewer where a user can query words from text files with given years and displays the frequency of those words in each year in a graph
- Implemented viewer with Java using hash maps and an open-source chart library to create graph

Water Temperature Scraper

- Created a program using Python that provides real-time water temperature data from beaches in SoCal
- Scrapes temperature data from the National Ocean and Atmospheric Administration's website
- Utilized the Beautifulsoup library and produced a more precise temperature reading than forecasting websites for a better grasp of conditions.

SKILLS

Languages: Java, C/C++, Python, JavaScript, HTML, CSS
OS: Unix / Linux, MacOS, Windows
Applications: Visual Studio Code, IntelliJ, Eclipse, Junit, Google Test, Git/GitHub, Docker, Microsoft Office