Giang Duong

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Education

University of California, Santa Cruz **Expected 2022**
Bachelor of Science in Computer Engineering, GPA: 3.61 *Santa Cruz, CA*

Experience

Economics Lab Software Developer June 2021 – Present
LEEPS Lab at University of California, Santa Cruz *Santa Cruz, CA*

- Developed full-stack multiplayer economics simulations using JavaScript, React, Django, and PostgreSQL
- Designed scripts to parse and visualize collected data using NumPy, Pandas, and Matplotlib libraries
- Collaborated with PhD candidates and professors to discuss project deadlines and features

Technical Skills

Languages: JavaScript, Python, C
Web Development: React, Node.js, PostgreSQL, MongoDB, HTML/CSS, Bootstrap, Django, jQuery
Developer Tools: Git, Visual Studio Code, Vim

Projects

Recommendation Engine: Daily Dose of Cuteness View Project View Code

- Created a video and picture recommendation app with **React** using media from Reddit.com
- Implemented a weighted pool selection algorithm to show users content similar to what they have "liked"
- Built a backend service using **Node.js** and **Express** to serve custom data from Reddit's **RESTful API**
- Incorporated private data storage for users' "liked" content using the **Web Storage API**

Fake News Quiz View Project View Code

- Developed a quiz app using **React** and **Bootstrap** in which users discern between real news and fake news given article titles and their claims from Snopes.com
- Integrated article data from Snopes.com into a **MongoDB** database using a custom web scraper
- Designed an API with **Node.js** and **Express** to serve article data from the database to the frontend

Sorting Algorithm Visualizer View Project View Code

- Built a **React** app to visualize sorting algorithms and compare their time and space complexities
- Incorporated settings for real-time variable animation speed and input data size for easy visual analysis
- Implemented merge sort, quick sort, selection sort, insertion sort, and bubble sort algorithms
- Utilized the **P5.js** library to create the animations and **Bootstrap** to create a responsive page design

Visual Studio Code Extension: Timer View Project View Code

- Developed a timer extension for **VS Code**, currently has **400+ downloads**
- Utilized the **VS Code API** to display the extension's graphics and controls
- Programmed with JavaScript in a **Node.js** development environment