Alexander Hoang

San Jose, CA — Davis, CA

Education

University of California, Davis

Bachelor of Science in Computer Science, Minor in Technology Management GPA: 3.50 Degree Completed in 3.5 Years Relevant Coursework: Algorithms, Discrete Math, Data Structures, Machine Dependent Programming, Algorithm Design and Analysis, Object Orientated Programming, Web Programming, Computer Architecture, Probability and Statistics In Progress: Operating Systems and System Programming

Technical Skills

Programming Languages: Python, C++, C, Kotlin, HTML/CSS, JavaScript, SQL/SQLite, RISC-V Assembly, System Verilog, x86 Assembly, LaTeX

Developer Tools: PyGame, Git, ReactJS, Node.js, Express.js, ModelSim, Quartus 2

Knowledge of: Object Orientated Programming, Android Development, Full Stack Development, Web Development Personal: Excellent in Leadership, Collaboration, and Problem-Solving. Strong Communication and Interpersonal Skills, Passionate, Self-Motivated, Organized, and Adaptive Learner

Work Experience

Math and Robotics Intern

July 2022 - Present

Expected: December 2023

C-STEM Robotics

Davis, CA

- Designed programming, math, and robotics exercises for the C-STEM curriculum using C and C++.
- Collaborated with team members to develop, review, and debug coding activities for their curriculum consisting of Geometry, Algebra 1 and Algebra 2.

Fellowship June 2022 – August 2022

The FarmLink Project

Davis, CA

- Created engaging and responsive user interactive web pages utilizing HTML/CSS for their website.
- Analyzed social media platform data and collaborated with analytics media-core team to increase user engagement.

Information Technology Support

March 2021 - July 2021

Corovan

San Jose, CA

• Analyzed, troubleshooted and assembled 100+ company computers and electronics.

Projects

Choose the Best TikTok | Node.js, SQLite, CSS, HTML

github.com/AlexHoangs/ChooseTheBestTiktok

- Produced user interactive web application allowing 300+ people to vote for their favorite video among list of 8 personalized user uploaded videos. Utilized SQLite to display list of video names and allow video addition or removal.
- Parsed video URL to preview video uploaded and display 2 videos side-by-side to allow users to compare and vote.
- Implemented PageRank algorithm to determine most popular video by utilizing SQLite to store data and votes.
- Employed Node.js and Express.js API to function as backend of server to get/request data with JSON objects

Local Food Truck Reviews | Kotlin, Android Studio

github.com/AlexHoangs/FoodTruckReviews

- Created user interactive Android application by fetching data from UC Davis food trucks web API.
- Implemented authentication with back-end server using ID tokens and Google's login API.
- Allowed authenticated users to view/post reviews about each food truck after logging into their Google account.
- Designed tab layout to switch between menu and reviews and cached data using Room database for offline use.

Discord Bot: Calorie Tracker | JavaScript, SQLite, Node.js

github.com/AlexHoangs/DiscordCalorieTracker

- Created a personalized user interactive bot to handle commands and keep track of user's calorie count.
- Prompts user to eat and input data about their recent meals to help reach their calorie goal for the day.
- Utilized SQLite to store parsed user inputted data and keep track of what days their calorie goals were met.
- Implemented **commands** to allow user to input/view list of food/calories consumed throughout the day.
- Hosted on local Linux server PC to run 24/7 for active users.

Battleship | C++

github.com/AlexHoangs/BattleshipWithAIs

- Developed a terminal-based battleship game with multiple options on who to play against
- Incorporated option to play against another player or three different types of **AI's** including, hunt and destroy AI, cheating AI, or random AI by utilizing **classes**, **inheritance**, **and polymorphism**.
- Allocates board space and allows user to personalize ship placement on any valid coordinate on the board.
- Displays each players current board, updating each turn with both opponent's view and player's view.