# 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

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

# Work Experience

C-STEM Robotics July 2022 – Present

Math and Robotics Intern

Davis, CA

- Assisted in programming activities for math and robotics curriculum for C-STEM program 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.

## The FarmLink Project

June 2022 - August 2022

Fellowship

Davis, CA

Expected: June 2024

- Worked on the analytics and media-core team to collaborate and anyalize data from social media platforms.
- Utilized HTML/CSS and WebFlow to help create engaging and responsive web pages for their website.

Corovan March 2021 – July 2021

Information Technology Support

San Jose, CA

- Analyzed and troubleshooted over 100 company computers and electronics.
- Assembled and disassembled computers and sorted electronics.

## **Projects**

## Choose the Best TikTok | Node.js, SQLite, CSS, HTML GitHub: 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 favorite video by utilizing SQLite to store user data and votes.
- Employed Node.js and Express.js API to function as the backend of the server to get/request data with JSON objects

#### Local Food Truck Reviews | Kotlin, Android Studio GitHub: github.com/AlexHoangs/FoodTruckReviews

- Created user interactive android application by fetching data from local food trucks web API (food trucks at UC Davis).
- 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 GitHub: 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: 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.

# **Technical Skills**

**Programming Languages**: Python, C++, C, Kotlin, HTML/CSS, JavaScript, SQL/SQLite, RISC-V Assembly, SystemVerilog, LaTeX

**Developer Tools**: PyGame, Git, ReactJS, Node.js, Express.js

Personal: Strong Verbal and Written Communication and Interpersonal Skills, Self-Motivated, Organized, Want to Learn