Alexander Hoang

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Education

University of California, Davis

Bachelor of Science in Computer Science, Minor in Technology Management GPA: 3.55

Relevant Coursework: Object Orientated Programming, Web Programming, Data Structures, Discrete Math, Algorithm Design and Analysis, Probability and Statistics, Bio-Informatics, Combinatorics, Computer Architecture, Machine Dependent Programming, Computer Vision, Operating Systems

In Progress: Machine Learning, Programming Languages, HCI, Computer Networks, AI, and Computer Security

Technical Skills

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

Developer Tools: Git, Flask, Plotly Dash, ReactJS, Node.js, Express.js, ModelSim, Quartus 2, Azure Stuid, Visul Studio Knowledge of: Object Orientated Programming, Android Development, Full Stack Development, Web Development Personal: Excellent in Leadership, Cross-Functional Collaboration, and Problem-Solving. Strong Communication and Interpersonal Skills, Passionate, Self-Motivated, Organized, and Adaptive Learner

Work Experience

Software Engineer Intern

June 2023 – September 2023

Intel Corporation

Santa Clara, CA

Expected: June 2024

- Worked on the **Power Performance and Analytic** team and collaborated cross functionally with the **Low Power**Graphics team to build software to help analyze and optimize GPU performance
- Implemented a dynamic dashboard for the LPG team, enabling seamless management, import, export, and visualization of numerous datasets from GPU outputs. Achieved 300% improvement in work efficiency
- Designed a streamline workflow to optimize database queries and processing times, now integrated across the entire development platform enabling the LPG team to seamlessly interact with data
- Utilized azure studio to monitor and test database queries before migrating code to production server
- Developed multiple API endpoints in C# to format and process table schemas of various datasets

Software Engineer

June 2023 – Present

Homeroom Remote

- Collaboratively produced a educational tool with endorsement features for teachers to effectively answer questions and allow students to reference, reducing redundancy. Incorporated and used in local high schools
- Implemented user authentication by encrypting high risk and important user data to safely store in Firebase
- Utilized DynamoDB to store classroom data for our user base of 40 students and teachers to reference

Lead Software Engineer

January 2023 – June 2023

CodeLab

Davis, CA

- Lead team of engineers/designers produce full-stack web tools to save prospective user data for startup clients
- Designed and implemented multiple workflows and curated unique outcomes for customers based on their input
- Employed different frameworks/libraries to keep prospective users attentive, increasing user traction by 10%

Projects

User Thread Library $\mid C$

Private Repo

- User-level thread library for linux that provides an interface to simulate multi-threading.
- Implemented User-Thread, Semaphore, and Preemption API's to allow users to create, run, and process threads concurrently in a round-robin fashion while limiting the number of threads that are allowed to run concurrently
- Installed a virtual timer to interrupt and prevent the current thread from starving other threads by yielding

 $\textbf{Discord Bot: Calorie Tracker} \mid \textit{JavaScript}, \; \textit{SQLite}, \; \textit{Node.js}$

github.com/AlexHoangs/DiscordCalorieTracker

- Created a personalized user interactive bot to handle commands and keep track of user's calorie count.
- 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.

TikTok Ranker | Node.js, SQLite, CSS, HTML

https://github.com/AlexHoangs/TikTok-Ranker

- Produced user interactive web app game for 300+ people to play and vote for their favorite video
- Enabled users to upload 8 personalized videos and employed SQLite to store videos and permit addition/removal
- Employed Node.js and Express.js API to function as backend of server to get/request data with JSON objects