Najel Alarcon

South San Francisco, CA | 415-527-8295 | nlalarco@ucsc.edu | linkedin.com/in/najel-alarcon

EDUCATION

University of California, Santa Cruz   *Sep 2019 - Jun 2023*
Bachelor of Science in Computer Engineering
Minor in Computer Science

WORK EXPERIENCE

Cashier/Line Cook   *June 2022 – Present*
Senor Sisig   *San Francisco, CA*
— Managed a high volume of transactions while maintaining a friendly and professional demeanor, resulting in positive feedback from customers
— Demonstrated expertise in assembling and preparing food with precision, ensuring each item met quality standards and reflected the restaurant's brand
— Collaborated closely with the kitchen team to efficiently fulfill customer orders during peak dining hours, contributing to a seamless dining experience

Software Engineer Intern   *October 2020 – April 2021*
Alef Aeronautics   *Santa Clara, CA*
— Utilized HTML, CSS, and JavaScript to create a responsive and intuitive user interface for monitoring vehicle systems
— Managed codebase efficiently using Git, ensuring version control and collaboration among team members, while also documenting changes and updates
— Documented front-end design patterns, codebase, and development processes to facilitate knowledge sharing within the development team and support future enhancements

PROJECTS

Slack Clone Mobile Application | *Kotlin, Swift, Javascript, HTML, CSS*

— Developed a Slack clone mobile application in Kotlin, Swift, and React Native

— Implemented RESTful API integration to enable real-time messaging, authorization tokens for access, and collaboration features within the application

— Conducted unit tests and debugging to identify and fix software defects, enhancing the stability and reliability of the application.

Reliable File Transfer | *C*

— Developed a proxy reliable file transfer application in C, utilizing the User Datagram Protocol (UDP) for efficient data transmission

— Designed and implemented a selective repeat protocol on top of UDP to ensure reliable and error-free file transfer, incorporating features such as acknowledgment, sequence numbers, and retransmission

— Implemented error detection and correction mechanisms, such as checksum calculations and packet acknowledgment, to guarantee the integrity and reliability of transmitted files

IoT Obstacle Detection System with SPI Accelerometer and BLE Connectivity | *C++*

— Developed an IoT Obstacle Detection System utilizing Arduino Nano 33 BLE, integrating IR Obstacle Avoidance Sensors (IRAS) with GPIO read/write operations to trigger an external red LED when an obstacle was detected.

— Integrated GPIO read/write for obstacle detection, displayed IRAS messages on LCD

— Configured Nano 33 BLE as a peripheral device, enabling real-time updates via BLE Cell Phone App or BLE console. Exposed custom read/notify service with GATT characteristics for X, Y, Z acceleration as 32-bit float numbers, motion status, and obstacle presence.

Single-thread Password Cracker | *C++*

— Developed a single-threaded password cracker application in C++ to perform password cracking on a simple four-character plain text

— Designed and implemented an efficient brute-force algorithm to systematically generate and test possible password combinations

SKILLS

Programming Languages: C, C++, Python, Javascript, Java

Technolgies: React, HTML, CSS, Git, Unix,