# Khanh Hoang

#### **EDUCATION**

# CALIFORNIA POLYTECHNIC STATE UNIVERSITY - SAN LUIS OBISPO

Bachelor of Science: Computer Engineering, GPA: 3.99

San Luis Obispo, CA Sep 2019 ~ Mar 2023

## RELEVANT COURSEWORK

- Microcontrollers/Embedded Appl.
- Computer Architecture
- Systems Programming
- Computer Design & Assembly
- Design and Analysis of Algorithms
- Object Oriented Programming
- Intro to Computer Security
- Intro to Operating Systems
- Intro to Computer Networks

#### **EXPERIENCE**

## CLARIS INTERNATIONAL - APPLE INC SUBSIDIARY

Software Engineering Intern

Sunnyvale, CA Jun 2022 – Sep 2022

- Developed using Agile Scrum methodologies on a software platform utilizing a CICD pipeline
- Designed and implemented a serverless end-to-end synthetic testing framework to ensure 100% uptime with third-party service integrations
- Created RESTful API endpoints for retrieving and writing to an AWS DynamoDB NoSQL database.
- Programmed NodeJS and Python backend code which were deployed to AWS infrastructures using the Terraform infrastructure as code (IaC) platform

## ROBERT E. KENNEDY LIBRARY

San Luis Obispo, CA Nov 2021 - Mar 2022

Student Assistant

- Operate the circulation desk as the main point of contact for patrons' inquiries and checkouts
- Organize and conduct inventories of library material

# STEAM FOR VIETNAM: ROBOTICS EDUCATION

Hanoi, Vietnam

Teaching Assistant

Oct 2020 - Apr 2021

- Assisted in preparing course to teach students aged 12-17 years old about robotics and programming
- Researched most suitable platform (VEX IQ w/ RobotMesh Python) for target audience
- Translated technical reference documents from English into Vietnamese

#### CAL POLY GEARSLINGERS: VEX U ROBOTICS TEAM

San Luis Obispo, CA Sep 2019 - Mar 2020

Software

- Developed C++ code for robot user-operated control for the 2020 VEX-U competition
- Utilized distance sensors, and gyroscope to program a predetermined set of movement for a robot

# **PROJECTS**

# Remote Controlled Smart Microwave (WIP) | C++, SPI, UART, LTE Communications | Senior Project

A microwave that communicates with a microcontroller and can be remotely controlled through phone calls and SMS.

# TinyFS File System | Python | Operating Systems Project

A persistent file system implementation that can be mounted from a file on disk to create files and store data.

## DANCE DANCE STMREVOLUTION | STM32 Microcontroller, SPI, GPIO, C | Embedded Systems Project

A "Dance Dance Revolution" style game developed on the embedded STM32 microcontroller.

## EDUCATIONAL ASSISTANT | NodeJS, SQLite 3, REST API | https://github.com/BenderNation/EdumacationBot

A Discord bot designed to assist with homework reminders and store notes. Connects to Canvas to retrieve notifications.

#### **SKILLS**

Java, C++, C

Linux OS & Bash Scripting

Amazon AWS

Python, NodeJS

Agile Methodology

Git Version Control

### **AWARDS**

PRESIDENT'S HONORS LIST - Cal Poly
<b>BEST BEGINNER HACK -</b> SLO Hacks
<b>3RD PLACE FINALIST -</b> Hack the Fog

| Consistently held GPA of 3.5+ each quarter for 2 years 2019-2021 | Awarded at the SLO Hacks 2020 hackathon Mar 2020 | Awarded at the Hack the Fog 2018 hackathon Feb 2018