JOSE LEVEL

Florida International University | BS in Computer Engineering 2020 | Apple Engineer
jose.levelh@gmail.com | San Diego, CA | 954-684-2274 | Website: joselevel.com

Work Experience

HID Automation and Tools Engineer, Apple — August 2021 - Present

- Tech lead for automation and sensor system validation on Airpods , Beats, and other audio products.
- Support algorithm development and user experience studies by automating data gathering from 5 sensors spanning hundreds of prototype devices.
- Work with cross-functional teams to ensure sensors meet quality milestones across hardware and software layers.
- Plan and demo sensor features and automation strategy to executives at new product and status reviews.

Embedded Software Development, Motorola Solutions — Jun - Aug 2020

- Expanded on the build system to compile release and test versions of firmware more easily. This increased safety of releases and streamlined the testing process significantly.
- Participated in the software development process using Agile methodologies to fix bugs and implement features ranging from buffer overflows to higher-level logic in radio commands.
- Performed "Voice of Customer" visits with the Baltimore City Fire Department to analyze feedback on prototypes.

Software and Electronics, GE Appliances — Jan - May 2019

- Developed Python script to interpret raw touch sensor data. My scripts allowed engineers to establish spec standards from different vendors for the hardware UI team and easily calibrate parts for testing.
- Designed capacitive touch testing rig and improved testing procedures for UI PCBs.

Engineering Consultant, Eco-Tabs — June 2018 - Jan 2019

- Reduced the company's large labor cost and overhead by leading the design and implementation of an automated dispensing system for bio-waste management tablets to reduce harmful H2S gasses in wastewater.
- Created a rugged system for the testing and deployment of the product in various real-world environments.

Projects

Social Meetup App with FastAPI and React — Nov 2022 - Present

- This app encourages people to share their in-person activities with friends and invite others to join them. The backend is built with FastAPI. It also uses JWT tokens for authentication and location services for mapping.
- The frontend is built with React, and uses Bootstrap for styling. The app features a clean and intuitive user interface that allows users to easily find and join friends in activities that interest them.

Using AI to Paint a Podcast — Oct - Nov 2022

- This app uses Assembly AI's speech-to-text API to process podcasts (or any audio) and summarizes them into usable prompts which are fed into Stable Diffusion's art generator API.
- Available through my website or on my Github, this app's front end uses Streamlit for clean UX and easy deployment.

LoRaWAN Remote Lake Water Quality Monitor — Nov 2020 - Jan 2021

- Developed a LoRaWAN remote water quality monitor for suburban lakes using Python. The LoRaWAN monitors promote safer domestic water use and ecological responsibility by measuring factors such as temperature and PH.
- Designed a lab based on this project for the FIU Electrical and Computer Engineering Department which helped undergraduate IoT Network Security students learn the setup and design of LoRaWAN and its cybersecurity.

Shell Hacks, FIU — 1st Place Hardware -> Sep 2018 | 2nd Place -> Oct 2020

- Designed an interface to play beer pong remotely to follow social distancing regulations. We created infrared enabled cups with a microprocessor to send data through USB Protocol and a C++ app that runs on the terminal.

IoT Bar Management System, FIU (Senior Design Capstone Project) — Sep 2019 - May 2020

- Acted as the project manager on the hardware integration and software architecture of a 4 person team by presenting the use of Git, and the Agile methodology to establish a CI environment.
- Developed software features such as Twilio SMS API integration and data dashboards on the Losant IoT platform. Our team worked together to develop the embedded software and PCB designs for the project.