



JOSE LEVEL

Florida International University BS in Computer Engineering 2020 | Apple Firmware Engineer

jose.levelh@gmail.com | 625 Broadway, 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. This allowed us to focus on higher demand features, improve our product design and reduce the time to market.

Software and Electronics Co-Op, 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 by creating an automated 3-axis button-pusher. This led to saving money in testing equipment & labor costs for UI board prototyping.

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

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

(2nd Place Overall-> Oct 2020) (1st Place Hardware Hack-> Sep 2018)

- 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 GitHub, and the Agile methodology to establish a CI environment.
- Personally 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.
- Conducted 100 customer interviews and consolidated customer feedback to define scope and timeline for our beverage inventory system which provides real-time, cloud-based data visualization on consumption in bars.