# JOSE LEVEL

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

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## Work Experience

### HID Automation and Tools Engineer ICT 3, Apple                     Oct 2022 - Present
- Develop software tools and automation infrastructure for AppleWatch touch stack.
- Maintain and improve API for data collection and debug for multitouch and water submersion algorithms.
- Design new data parsers and streamers for tracking analytics for key metrics from users in the field.
- Plan and demo sensor features and automation strategy to executives at new product and status reviews.

### HID Automation and Tools Engineer ICT 2, Apple                     Aug 2021 - Oct 2022
- Responsible for "In-Ear Detection" API and automation on Airpods and Beats products.
- Supported algorithm development and user experience studies by automating data collection and analysis from 5 sensors spanning thousands of prototype devices.
- Work with cross-functional teams to meet milestones across hardware and software layers.

### 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.
- Used Agile methodologies to fix bugs and implement new features on mobile radios.
- Performed "Voice of Customer" visits with Fire Departments to analyze feedback on prototypes.

### Software and Electronics, GE Appliances                     Jan - May 2019
- Developed Python script to interpret raw touch sensor data. This allowed engineers to establish spec standards from different vendors for the UI team and easily calibrate parts.
- Designed capacitive touch testing rig and improved testing procedures for UI PCBs.

## Projects

### Magazine API with CI/CD on Google Cloud Platform                     Dec 2023 - Present
- Built with FastAPI and MongoDb, this project provides an API for searching and tagging images from "Drakes" menswear magazine and clothing store and serving them as JSON.
- End to end continuous integration and deployment including automated Pytest testing and PEP 8 adherence using Github Actions, along with Docker container building on merge with Google Cloud Build.
- Automatic deployment of managed containers using Kubernetes Engine and Google Cloud Run Service.
- Images from latest clothing items and photoshoots are scraped using BeautifulSoup and Selenium.
- Content is uploaded and distributed worldwide with Google CDN for scalability and reliability.
- Image links are indexed and tagged on Mongo Database with scaled hosting using Mongo Atlas servers.

### Social Meetup App with FastAPI and React                     Nov 2022 - Present
- Web app encouraging people to share their in-person activities with friends and invite others to join.
- Backend is built with FastAPI and MySQL, JWT tokens for authentication and location mapping.
- Frontend built with React, and Bootstrap for styling with user interface built on top of Mapbox allowing users to see their friend's activities on the map and join their group.

### Using AI to Paint a Podcast                     Oct - Nov 2022
- Python app to generate podcast thumbnails using Assembly AI's speech-to-text API to process podcast audio and summarize them into usable prompts which are fed into Stable Diffusion's art generator API.
- Front end uses Streamlit for clean UX and easy deployment.