Jacob Kolb

RESEARCH SOFTWARE ENGINEER

Profile

Experienced and innovative software engineer with a passion for signals, sensors, and electro-mechanical systems. I have a deep interest in assistive technologies that can improve quality of life and our ability to connect as humans. I am excited to be a part of building the future using technologies like machine learning and AR/VR. For example, I created ultra-sonic depth sensors with stereo output to earbuds, intended to assist visually impaired detect approaching objects through frequency modulated tones (L, R) between 20 Hz to 20 kHz, depending on user sensitivity.

Employment History

Production Engineering Manager, Fortem Technologies, Pleasant Grove

AUGUST 2019 — JANUARY 2022

Key tools: GitLab, Jira, Slack, Google Office, Agile (Scrum and Kanban)

- Contrive creative solutions to unique and ambiguous problems
- Continuous deployment of production system to dispersed manufacturers
- Review and approve engineering change requests as member of change review board
- Review and approve merge request via GitLab
- Hold periodic 1-1 employee performance reviews of engineers and technicians
- Conduct periodic technical and safety training

Jr. Algorithms and Radar Systems Engineer, Fortem Technologies, Pleasant Grove

AUGUST 2017 — JUNE 2021

Key tools: Python, Linux, C/C++, GitLab, robotics, RF equipment, electronics lab

- Develop preliminary beamformer IC interface using protocol buffers
- Develop 3D sensor calibration system to meet product performance demands
- Automate sensor calibration solutions when perceived nominal process flow discovered
- Improve sensor calibration algorithms and processes as needed to reduce cost and time
- Data visualization tools and utilities
- ETL calibration data into local database
- Build, troubleshoot, repair sensors and PCBAs

Education

B.S. Computer Science, Western Governor University, Salt Lake City

SEPTEMBER 2022

Emphasis Machine Learning and Algorithms (WGU)

Psychoacoustics and Audio Modeling Lab Volunteer, Disability Studies, Theater Audio (U of U)

A.S. Applied Sciences, Utah Valley Uniersity, Orem

APRIL 2015

Emphasis in Biology and Chemistry

Details

8016366179

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Links

LinkedIn Profile

Skills

Python

C++

Digital Signal Processing

Matlab

Unity

Languages

English

Spanish