Spencer Young

Computer Engineer

Objective: Full time position in software, data science or computer engineering.

Education

B.S Computer Engineering University of Hawaii, Manoa

Aug. 2017 - Expected Dec. 2020

- **GPA**: 3.69 / 4.00; **Honors**: Dean's List Fall 2017 Spring 2020
- **Skills / Technologies**: HTML, CSS, JavaScript, C/C++, Node.js, React, Redux, Vue, Git, Unix, Docker, Python, Golang, SystemVerilog, LogicWorks, Oscilloscope, Soldering, REST, Jira, Agile, Raspberry Pi
- **Relevant Coursework**: Programming in C/C++, Digital Design (VHDL), Computer Architecture (ARMv8, SystemVerilog), Discrete Math, Signals and Systems, Microelectronics, Electromagnetism, AC/DC Circuit Analysis, Probability & Statistics, Machine Learning, Algorithms & Data Structures, Software Engineering
- Current Courses: Digital Image Processing, Linear Feedback Control Systems, Operating Systems

Recording Secretary / Pledge Eta Kappa Nu (HKN), IEEE Honor Society

Aug. 2019 - NOW

• Provide tutoring to underclassmen, volunteer for various university events.

Contestant Mauna Kea Scholars

Sept. 2016 - Apr. 2017

• Created a proposal and received telescope time at the East Asia Observatory to study star forming regions.

Experience

Satellite Assistant Software Developer Hawaii Space Flight Laboratory (Miguel Nunes)

Mar. 2019 - NOW

- Bolstered efforts with creating C/C++ apps for satellite ops like data aggregation and radio commanding for Neutron-1 and HyTI cubesats.
- Lead efforts in creating an open source web app in React to assist with mission visualization and control.
- Contributed to core dev of the Comprehensive Open-architecture Solution for Mission Operations Systems (COSMOS).
- Design project from 2017 2018; prototyped satellite ops web application visualization and controlling.

Lead Core Developer Aeoss

Jan. 2018 - NOW

• Assist in the development of free, open source gaming software products such as Response (police management software) and Identity (authentication system) using Vue.js, Laravel (PHP) and Golang.

Consultant Topos Media: Shopping Cart/List Application

May 2018 - Jun. 2018

- Created a React.js and Express.js web application that allows customers to add items to their cart/list.
- Improved the experience for the customer by automatically calculating prices based on quantities and automatically handling requests for proposals by sending an email to the distributor.

Image Processing Team Member UH Drone Technologies (Wayne Shiroma)

Aug. 2018 - May 2019

- Created an object detector of shape characteristics using the TensorFlow Object Detection API (machine learning framework) for a search and rescue competition.
- Created a Python program to build the dataset for the object detection machine learning model.

Contestant Hawaii Annual Code Challenge

2017, 2018, 2019

- 2019: Create a mobile application using React Native to support local community engagement.
- 2018: Created the Vue.js web application aspect of a plant recognition application through machine learning to assist with aggregating an indigenous Hawaiian plant database (team ohia.ai 4th place)
- 2017: Created an automated election volunteer scheduler (team Volume Seven)

Community Service

Founder & Moderator Discord Server: Homework Help

Oct. 2016 - NOW

- Created server called Homework Help to foster learning in any school subject and encourage collaboration.
- Moderate server of over 12000 members, manage a staff team and organize events for the public such as math and science challenges, debates and creativity challenges.
- Manage an open source bot based on JavaScript (discord.js) to assist in daily operations.
- Invite Link: https://discord.gg/YudDZtb