# FRENDY LIO

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## **EDUCATION**

University of Hawai'i at Mānoa

Aug. 2020 – Dec. 2021

 ${\it Master of Science in Electrical Engineering}$ 

Honolulu, HI

• Major GPA: 4.0/4.0

University of Hawai'i at Mānoa

Aug. 2018 - May 2020

Bachelor of Science in Computer Engineering

Honolulu, HI

• Major GPA: 3.69/4.0

## **EXPERIENCE**

#### University of Hawai'i at Mānoa

Aug. 2020 - Present

Honolulu, HI

Research Assistant - Software Developer

• Developing scripts to control and spoof/trick the trajectory of unmanned aerial vehicles.

- Programming software to gather data from corrosion sensors.
- Trogramming software to gather data from corrosion sensors.

• Main tools: ArduPilot, Bash, DroneKit, MavLINK, and Python.

STAR Jun. 2018 - July 2021

Lead SQL Programmer Honolulu, HI

- Lead the backend team of 7 to maintain and develop STAR Balance, an appointment website for all 50,000+ students and advisors at any 10 campuses of the University of Hawai'i System.
- Discussed solutions and alternatives with clients on new features and currents bugs for STAR Balance.
- Programmed user-friendly interfaces for administrators for the different products of STAR.
- Main tools: MS Access, and MS SQL Server.

Dec. 2019 – May 2020

Software Engineer Intern

Honolulu, HI

- Lead a team of 7 to created a kiosk check-in app for the animal quarantine station for the state of Hawaii that consists of a front-display and queueing system.
- Main tools: Angular, CSS, C#, HTML, MS SQL Server, and Typescript.

## **COMPETITIONS**

### AI Racing Tech - Indy Autonomous Challenge

May 2021 - Present

Perception Team

Honolulu, HI

- Discussing and creating the percetion section that creates the data processing and gathering for an autonomous racing car.
- Main tools: C++, Docker, ROS, and, Python

## Game The System - HACC 2020

Oct. 2020 - Nov. 2020

Lead Backend Developer

Honolulu, HI

- Runner-up in Hawaii Annual Code Challenge 2020.
- Participated with a team of 7 and lead the back-end team to develop a web application to optimize and ensure ITS building security and guest access management.
- Main tools: Laravel, MS SQL Server, and Amazon Web Services.

CRAM - EduHacks 2020 Aug. 2020 – Oct 2020

Project Manager

Honolulu, HI

- Third prize out of 250 teams internationally.
- Organized a team of four to create CRAM, a CRedit Asset Management website where students can see their credits and plan their pathway while keeping their privacy via BlockChain.
- Main tools: VueJS, DDN BlockChain, and MS SQL Server.

#### **HECO Rewards - HACC 2019**

Oct. 2019 - Nov. 2019

Lead Hardware Developer

Honolulu, HI

- First place in Hawaii Annual Code Challenge 2019.
- Collaborated in a team of eight to create a solution to increase the understanding of the current and future data from EV Charging Stations.
- Built and set up a Raspberry Pi with an Arduino Camera that will read the card's license plates and store them in our database.
- Main tools: MS SQL Server, and Python.