

Frendy Lio

[Linkedin: frendylio](#) / [Github: frendylio](#)

Honolulu, Hawaii

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(808)-256-1848

Education

B.S., Electrical Engineering, GPA: 3.66, University of Hawai'i at Mānoa

Expected graduation: May 2020

A.A.S., Engineering, GPA: 3.95, Leeward Community College

Skills

- **Programming:** T-SQL, VBA, Python, HTML, CSS, JavaScript, C++, C, MATLAB
- **Tools:** MS Access, Git, Linux, React, LogicWorks, SolidWorks, LabVIEW

Work Experience

University of Hawai'i at Mānoa

Lead SQL Programmer – STAR

Jun 2018 - Present

- Assist, maintain, and optimize stored T-SQL database procedures for student registration, academic transcripts, and degree planning activities for all 10 campuses of the University of Hawai'i System with 53,000+ students and faculty.
- Create and maintain MS Access interfaces for securities and set up of scholarships, degree pathways and reports for all 10 campuses of the University of Hawai'i System.
- Manage and lead the back-end team of 10 to maintain and develop an appointment website for all students and advisors at any 10 campuses of the University of Hawai'i System.

Undergraduate Teaching Assistant – College of Engineering

December 2019 – Present

- Assisting and mentoring 26 students in groups and on an individual basis.
- Managing weekly labs of object-oriented programming course in C++

DataHouse – Mentorship Program

Full Stack Programmer

December 2019 – Present

- Lead Back-End Developer that is working with a team of 7 to create a kiosk display and a queue system to facilitate the work system of the animal quarantine.
- Presenting proposals and presentations to the Department of Agriculture, members of animal quarantine and DataHouse.

Project Experience

University of Hawai'i at Mānoa – Machine Learning

Capstone Project

Aug. 2019 – Present

- Develop an algorithm that learnt how to play a simple well-defined game in Python.
- Using iPython and the MNIST database to establish our basic algorithm for machine learning.
- Project directed under Dr. Prasad Santhanam.

Hawaii Annual Code Challenge (HACC)

Lead Hardware Developer – HECO Rewards

Oct. 2019 – Nov. 2019

- First place in HACC 2019
- Co-collaborated in a team of eight to create a solution to increase the understanding of the current data, and future data that HECO will be able to obtain about their Electrical Vehicle Charging Stations.
- Build and Set up a Raspberry Pi with an Arduino Camera that will read card's license plates and storage it to our database using Python and OpenCV.

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Database Programmer – Kumu App

Oct. 2018 – Nov. 2018

- Co-collaborated in a team of five, designed and built a two-part system for efficient, user-friendly data reporting and visualization for native Hawaiian plants.
- Developed the backend of the app using PHP and SQL.
- Placed in the top 12 out of 50 in the HACC 2018.

University of Hawai'i at Mānoa – Kali Linux

May. 2019 – Aug. 2019

Cyber Security Programmer

- Co-collaborated in a team of two, worked in a controlled environment and recreated specific attacks on a simple wireless network to see firsthand how flaws in the protocol can lead to network infiltration.
- Project completed under Dr. Yingfei Dong.

University of Hawai'i at Mānoa - Laplace Barrier

Research Assistant

Jun. 2018 – Aug. 2018

- Presented on the 2018 PEEC II Symposium: O Ke Kahua Mamua, Mahope Ke Kūkulu.
- Assisted with merging and splitting of liquid metal inside of a polydimethylsiloxane (PDMS) by using electrodes.
- Created PDMS with small barriers with the size of 100 micrometers that were bounded to a glass slide by using a machine that would generate electric fields.
- Project completed under Dr. Aaron Ohta.

Leeward Community College - CANSAT

Lead Mechanical Designer

Dec. 2017 – Mar. 2018

- Co-collaborated in a team of eight, designed, developed and simulated a space CANSAT entering a planetary atmosphere.
- Designed the Heat Shield, Electronics compartment and structure of the CANSAT.
- Placed top 85 in the CANSAT international competition.

Activities

Pledge - IEEE-Eta Kappa Nu (HKN) Honor Society, University of Hawai'i at Mānoa

- Provide tutoring for freshman and sophomore.
- Volunteer for various event related to IEEE and the University of Hawai'i at Mānoa.

Member - Programing and Development Club (PDC)

- Participate in the code reviews and white board interview sections.

Member - Native Hawaiian Science and Engineering Mentorship Program (NHSEMP)

- Mentor and volunteer for various event related to NHSEMP.

Languages

Spanish, Portuguese