# **Objective**

Seeking an internship in Software engineering emphasizing in database, data analytics and machine learning.

### **Education**

B.S., Electrical Engineering, GPA: 3.62, University of Hawai'i at Mānoa

Expected graduation: May 2020

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

## **Skills**

- Programming: SQL, VBA, C++, C, Python, MATLAB, HTML, CSS

- Tools: Git, Linux, LogicWorks, SolidWorks, MS Access, LabVIEW

## **Work Experience**

## University of Hawai'i at Mānoa

STAR – SQL Programmer

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 4 to maintain and develop an appointment website for all students and advisors at any 10 campuses of the University of Hawai'i System.

# **Project Experience**

### University of Hawai'i at Mānoa - Machine Learning

Capstone Project
- Develop an algorithm that learnt how to play a simple well defined game in Python.

Aug. 2019 - Present

- Using iPython and the MNIST database to establish our basic algorithm for machine learning.
- Reviewing basic concepts of Machine Learning algorithms and the underlying Linear Algebra.
- 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.

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.

## Frendy Lio

<u>Linkedin: frendylio</u> / <u>Github: frendylio</u> Honolulu, Hawaii frendy@hawaii.edu (808)-256-1848

May. 2019 - Aug. 2019

#### University of Hawai'i at Mānoa - Kali Linux

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**

## IEEE-Eta Kappa Nu (HKN) Honor Society, UH Manoa

- Provide tutoring for freshman and sophomore.
- Volunteer for various event related to IEEE.

#### **Programing and Development Club (PDC)**

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

#### Native Hawaiian Science and Engineering Mentorship Program (NHSEMP)

- Mentor and volunteer for various event related to NHSEMP.

## Languages

Spanish, Portuguese