

# Frank Pang

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## EDUCATION

### UNIVERSITY OF SOUTHERN CALIFORNIA

Los Angeles, CA

#### COMPUTER SCIENCE

May 2018

GPA: 3.82 / 4.00

## SKILLS

### PROGRAMMING

Languages:

C++ • Python • JavaScript •

HTML • CSS

Tools/Libraries:

Git • Arduino • ReactNative

## PROJECTS

### AIRIS

C++, OpenCV

Console application that detects motion in a live video feed using image differencing.

Best in Software at the Honolulu Science Fair.

Awarded 3rd Place in Software at the Hawaii State Science Fair.

### HAMM

React Native, Redux, Firebase

Mobile expense tracker using Firebase authentication to log expenses by category.

Used Redux for project scalability.

## COURSEWORK

- Data Structures & Object Oriented Design (C++)
- Discrete Math
- Intro to Programming (C++)
- Intro to Embedded Systems
- Multivariable Calculus
- Linear Algebra & Differential Equations
- Mobile Application Technologies

## EXPERIENCE

### SHIFTED ENERGY | SOFTWARE ENGINEERING INTERN

June 2018 – August 2018 | Python, Automate Green API

- Developed data processing tools to allow Hawaii grid service providers to automate energy management with IoT devices.
- Generated Apache export files from IoT device data (JSON) for data visualization. Standardized export data by specific relay, status update, and ffr cases.
- Reduced program runtime by refactoring C# code and minimizing API calls.

### UNIVERSITY OF HAWAII AT MANOA | STUDENT RESEARCHER

May 2018 – August 2018 | Python, Stanford Parser, Regex, NLP

- Collaborated with the Pacific Disaster Center to implement a Natural Language Processing solution to summarize information from unstandardized disaster data.
- Generated XML files of tsunami, cyclone, and volcano events using auto-correct APIs and the Stanford Parser to extract word dependency relationships.
- Used scalable object-oriented design based on warning types and organized synonyms, abbreviations, and word relationships to format information.

### ATHERTON YMCA | COLLEGE CAMP MENTOR

June 2018 - July 2018 | Volunteering, Leadership, Education

- Mentored in a week long camp of 34 low-income high school students to prepare and encourage them to pursue higher education.
- Focused on mentoring 7 individual students and facilitated discussion and reflection of dreams, aspirations, and college preparedness.
- Upon completion of the camp, all students were offered acceptance to the University of Hawaii at Hilo upon fulfilling admission requirements.

### USC AUTONOMOUS UNDERWATER VEHICLE | VISION TEAM

January 2018 - May 2018 | Python, Tensorflow, Google Cloud

- Meets 4hrs/week; Used TensorFlow, Python 2.7, and Google Cloud Platform to train/label images for underwater object recognition.

### USC MEDESIGN | BREATHALYZER TEAM

August 2017 - May 2018 | Arduino, Printed Circuit Board

- Meets 4hrs/week; Collaborated and prototyped a working breathalyzer using a PCB, sensors, and an Arduino by engaging in discussion and implementation of the project's design and future steps.

### CENTER FOR TOMORROW'S LEADERS | MCKINLEY AMBASSADOR

August 2013 - May 2017 | Volunteering, Leadership, Education

- Led a project that assembled homeless families from shelters, landlords, and government officials to house families and discuss the Housing First initiative.
- Led ROOTS - program to engage young adolescents in integrating STEM with leadership. Taught them practices of leadership and guided them in building their own customized garden bed.