



Team Pineapple

"Always Ripe."





Introductions



Kevin Liu

Track:
Computer Engineering

Class:
Sophomore





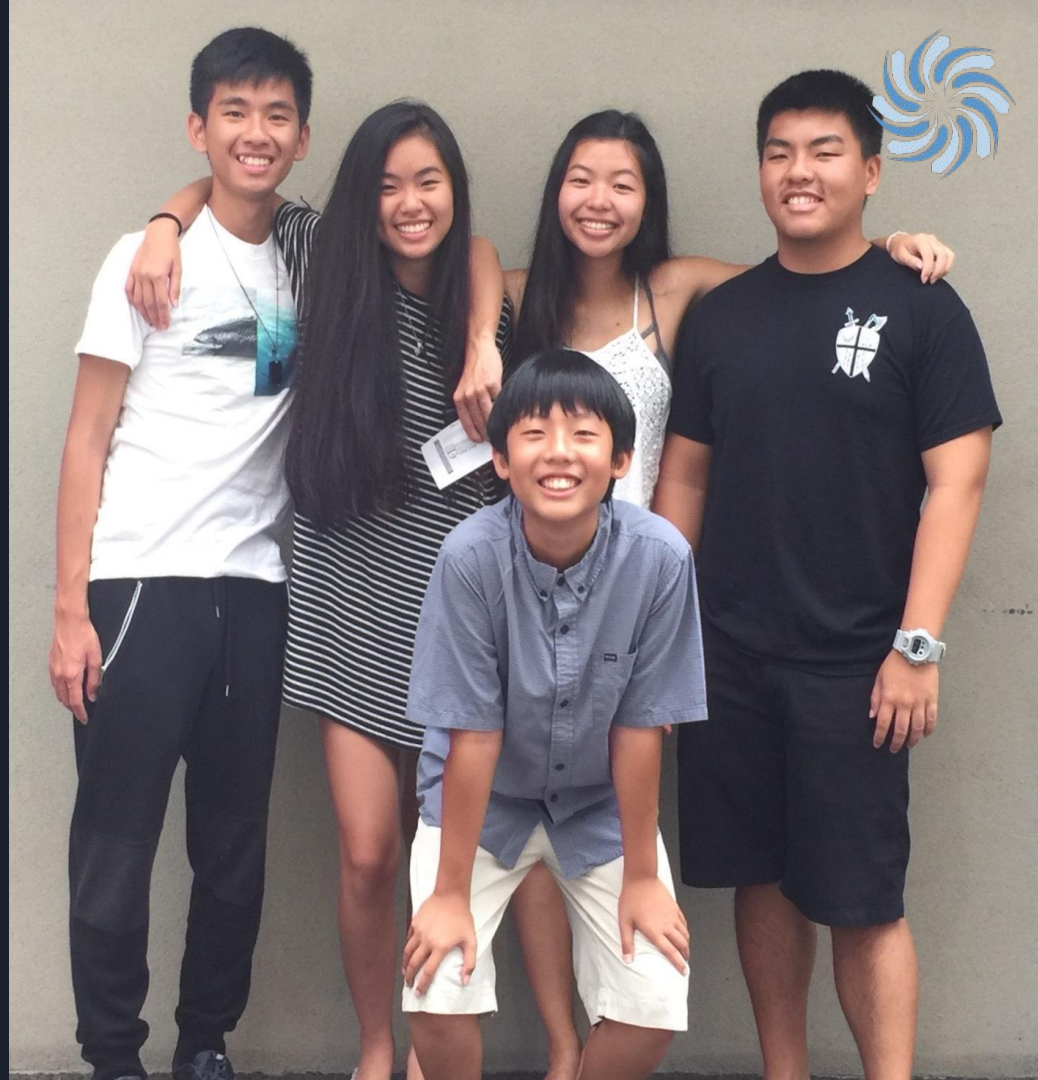
Alex Wong

Track:

Electrophysics

Class Standing:

Sophomore





Joseph McConnell

Track:

Electro-physics

Class Standing:

Sophomore





Motivation

- Make UH Manoa a microgrid that is self-sustainable
- Gather weather and power consumption usage information
- Help reduce UH Manoa's carbon footprint and tuition costs
- Save Mother Nature





Project Overview

Design, build, and deploy a WeatherBox

- Collects weather data to be used to measure environmental data
- Solar-powered, low-cost device that can be easily reproduced
- Deploying on roofs of UH Manoa buildings



WeatherBox



Semester Goals

- Acquire and independently apply design techniques
 - Arduino Uno
 - Eagle
 - Soldering
- Improve our presentation and networking skills
- Build a functioning, compact, cost-efficient prototype WeatherBox





Completed Progress

- Completed tutorials
 - Arduino
 - Embedded Systems
- Tested sensors
 - Solar Irradiance (SP215)
 - Temperature & Humidity (SHT11)
 - Pressure/Temperature/Humidity (BME280)





Next Steps

- Continue Eagle tutorial
- Create Schematic for board
- PCB Design on Eagle
- Learn XBee





Questions
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