# Scott Fischer

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• WEBSITE: https://scottfischer.org/

## • GITHUB: HTTPS://GITHUB.COM/SCOTTIE-FISCHER

## **Work Experience**

### Element Science San Francisco, CA

#### Software Engineer I,

September 2022 - Present

- Develop enhancements and address defects for:
  - Frontend portal using JavaScript and React
  - o Cloud backend using Python and Postgres
- Develop dashboard frontend application using JavaScript and React to support devices
- Design, develop, execute and document software verification and quality testing protocols
- Develop enhancements for production mobile application using Swift
  - o Develop and support BLE communication between Swift application and firmware on device
- Design and develop prototype cross platform applications using Dart and Flutter framework
  - Design BLE communications between device and application
  - Design and develop serial USB communication

US Army Marina, CA

## **Signal Support Systems** Specialist,

February 2019 - Present

- Supervising, installing, maintaining, and troubleshooting battlefield signal support systems. This includes terminal devices, satellite communications equipment, and automated telecommunications computer systems (local area networks, wide area networks, and routers)
- Performs hands on unit level maintenance and preventative maintenance on satellite and signal communication systems in rapidly adaptable environment

### Certifications

Secret Security Clearance

### Skills

- Strong C/C++
- Dart an Flutter
- Intermediate Python
- Javascript
- React
- HTML/CSS
- QT Library
- **SQL**
- Git
- Scrum / Agile
- Documentation
- Basic AWS

# **Personal Project**

#### Oscilloscope

#### **Personal Project**

- Used a Cypress microcontroller with an ADC peripheral in order to measure waveforms from 1kHz to 100kHz
  - The input signal comes through a GPIO pin on the microcontroller then is converted using the ADC peripheral which is fed into a DMA peripheral
  - During a certain time period the DMA would fill an array, once full the array would be processed while another array was filled
  - After a certain time period I would average the data and print to an LCD
- Automated Watering System
  - Used raspberry pi pico microcontroller, 3V brushless water pump motor, and capacitive soil meters
  - On interrupt a function that looks for false positives from the sensor, then on pure positives it runs the motor by activating a GPIO pin that is connected to the base of the transistor. The motor runs for minimum of 2 seconds or runs until the sensor deems there is enough moisture