

# DYLAN SHACKELFORD

## SOFTWARE ENGINEER

### CONTACT

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San Diego, CA

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### EDUCATION

Bachelor of Science,  
Mechanical Engineering

*University of California,*

*Santa Barbara*

2013 - 2017

Santa Barbara, CA

### SKILLS

Swift/Objc

Kotlin/Java

Python

SQL, SQLite

AWS/S3

PHP

Arduino

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SolidWorks

AutoCAD

FreeCAD

Matlab

Octave

### HANDS ON

CircleSaw

DrillPress

Tap & Die

Soldering

Lathe

Push Broom

### LICESNES

FAA Part 107 Remote Pilot

### WORK EXPERIENCE

#### Staff Engineer

##### *Drones Made Easy*

2017 - Current (San Diego, CA)

- Lead developer of Map Pilot Pro for both Android and iOS
- Implemented Key features:
  - Terrain Awareness - generated elevation profiles for drone to maintain constant elevation over the ground.
  - Quick Map Stitching - allowing on-device stitching of photos immediately after mission completion.
- Developed User Login and Subscription functionality, managing user information and access levels.
- Facilitated data transfer using AWS Services to sync user flight data (CSVs, KMLs, JSON, JPEGs) between devices and website.
- Managed requests to the website through JSON and RESTful APIs, ensuring seamless communication between the app and server.
- Supported multiple Drone SDKs including DJI, Autel, & Parrot, to extend application compatibility.

#### Systems Lead

##### *NOAA Radar Station - USCB Capstone Project*

2016 - 2017 (Santa Barbara, CA)

- Directed a team of 5 members to meet design requirements.
- Developed a Proof of Concept Battery Management System to conserve radar power consumption.
- Collaborated with NOAA officials on campus to install a Radar station at Campus Point.
- Researched and identified components for future installations.

#### Shop Assistant

##### *Southern California Vintage Trailer*

Summers 2014 - 2017 (San Diego, CA)

- Helped restore vintage Airstream trailer for clients.
- Performed tasks such as riveting aluminum cover skins and sand blasted rusted parts.

#### Freelance Design Engineer

##### *Mutable Campers*

2020 - Current (San Diego, CA)

- Developing a custom “camper canopy” out of 8020 aluminum and sheet metal to fit onto a truck bed.
- Utilized FreeCAD to design sheet metal parts and rail assemblies.
- Employed Octave for tolerance geometry studies to guarantee optimal lever arm range of motion.