DYLAN SHACKELFORD

MECHANICAL 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)

- Used SolidWorks to design brackets for mounting custom hardware onto DJI Drone platforms.
- Used 3D Printer for rapid and iterative design improvement.
- Generated technical drawings for machine shops to get designs produced in a variety of materials and finishes (aluminum, carbon fiber, plastics).
- Managed the processes of assembling mapping rig bundles with custom designed calibration plates.
- Tested designs in real flight scenarios.
- Worked with Sony's Agricultural team to develop mounting brackets for their Multispectral platform on multiple DJI Drones.

Systems Lead

NOAA Radar Station - USCB Capstone Project
2016 - 2017 (Santa Barbara, CA)

- Managed team of 5 to meet design requirements and deadlines.
- Worked with NOAA officials on campus to install a Radar station at Campus Point to help monitor fishing vessel traffic in the ocean.
- Found components for sale that could be easily purchased again for future installments (Telescoping tower, batteries…)
- Developed a Battery Management system in python to help provide readings of battery health on a website when the system would be deployed in remote locations on the Channel Islands.

Shop Assistant

Southern California Vintage Trailer
Summers 2014 - 2017 (San Diego, CA)

- Restored vintage Airstream trailers for clients
- Riveted aluminum cover skins and sand blasted rusted parts
- Ran electrical lines to appliances
- Cleaned the shop

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
- Designed SheetMetal parts and rail assemblies in FreeCAD
- Ran tolerance geometry solutions in Octave