

Sam Reynolds

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EXPERIENCE

Ionic Skies, UCSB — Airframe Lead

April 2020 - PRESENT

- Leader of the Airframe Team, personally in charge of flight control, aerodynamics, and mass balance
- Interdisciplinary team of 14 Engineers building an *Ionic Wind* aircraft
- If successful will be the 2nd of its kind in the world

Mothership Aero, San Mateo — Robotics Intern

June - September 2020

- Designed and installed the wiring harness and avionics on an 800W *Hydrogen Fuel Cell* commercial drone
- Individual project to design, test, and build a *Lifting Body Tilt Rotor* drone from the ground up
- Produced a carbon fiber and 3D printed prototype demonstrating autonomous and high speed LBTR flight

PROJECTS

Human Identification Hat — Intro to Design

- A social distancing hat that triggers an audio and visual alarm when it detects a person within 6 feet.
- Utilises *LiDar*, ultrasonic sensors, an accelerometer, and an Arduino to identify people with a relative velocity algorithm

ADDITIONAL EXPERIENCE

Varsity Sailing Team Captain — UCSB

- Leading a team of 25 students, managing training, travel, and budget
- Year round collegiate competition, 17+ hours a week and frequent travel

HOBBIES AND INTERESTS

Skiing Surfing Kitesurfing Backpacking Freediving

EDUCATION

UC Santa Barbara 2021

B.S Mechanical Engineering

GPA 3.4

Technical University Berlin

Study Abroad 2019

SKILLS & COURSEWORK

PX4 and QGroundControl

3D printing and Structural part design

Avionics integration and Wiring harnesses

Thermodynamics and Fluids

Machining and GD&T

SOFTWARE SKILLS

Solidworks

MATLAB

LabView & Simulink

Arduino

GitHub & Python

LaTEX