

DORIAN CRUTCHER

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EDUCATION

University of California, Davis

Davis, CA

Bachelors of Science in Mechanical Engineering, expected 12/2018

- Team won best in class for final MATLAB project

SKILLS

- **Software:** SolidWorks, PTC Creo Mathworks MATLAB, Microsoft Office, CNC Programming, Esprit, Scan Studio, Repetier Host, VCarve, NASA Overgrid/Overflow Software, C/C++ Programming, Unity Engine
- **Hardware:** Sensors, Woodworking, Machining operations (Lathe, Band saw, Milling, etc.), 3D Printing

EXPERIENCE

UC Davis Engineering Student Startup Center (ESSC)

Davis, CA

Workshop Manager, Mar 2016 – Present

- Oversee the creation of new workshops by working with other student managers to draft teaching materials
- Teach 3D printing, 3D modeling, Arduino programming, and CNC mill programming workshops
- Coordinate shifts and workshop schedule for a team of six
- Analyze other students' designs - giving them recommendations on how to optimize and rapidly prototype

UC Davis Hyperloop Team

Davis, CA

Head Designer & Sub-System Leader – Eddy Braking System, Sept 2017 - Present

- Lead a team of engineers from diverse backgrounds, by delegating tasks, creating and reviewing designs, and providing an overall direction of the best design strategy for the pod
- Research current eddy theory and applications independently

Design and improve upon designs using SolidWorks for eddy braking system

UC Davis Solar Car

Davis, CA

Member/Suspension Team, Aug 2015 – Sept 2017

- Collaborated with peer designers using SolidWorks to develop a working suspension design for the car
- Assisted in manufacturing the vehicle chassis and suspension

UC Davis Aeroacoustics/Aerodynamics Research Lab

Davis, CA

Research Assistant, Mar 2017 – Oct 2017

- Chosen for position based on excellence in Fluids course
- Conducted mathematical and computational research on fluid mechanics, aerodynamics, and aeroacoustics with in applications for rotocraft, wind energy and turbomachinery
- Utilized NASA's OVERFLOW and OVERGRID software in order to create CFD simulations

UC Davis Police Department

Davis, CA

Aggie Host Security Officer, Dec 2014 - Feb 2017

- Maintained campus and student security through area checks, building checks, nightly patrols, and event details
- Served as Safe Ride Driver for the UCD Safe Ride Escort Service

Cans4Care

Riverside, CA

Founder & CEO, Jun 2010 – Aug 2013

- Founded and managed non-profit organization to provide financial aid to other nonprofits and students
- Collected and consolidated recyclable items and turned them over to a partnering recycling center for profit
- Established clients, hired and managed employees, delegated work, and coordinated locations and insurance
- Partnered with Riverside Community Hospital to redirect their recyclable items in-flux to our company

EXTRACURRICULAR

- Flight School Graduate
- Volunteer with Homeless Outreach Program