

# Fletcher Porter

Monrovia, CA • 626-321-6687 • me@FletcherPorter.com • <http://FletcherPorter.com> • Class of 2019

## Employment

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### **NASA Jet Propulsion Laboratory** (Robotics Intern) — Summer 2016

- Performed test on the drivetrain for the OWMS Deep Subsurface Access probe
- Added actuation to the OWMS Lander Proximity test
- Created models for a level wind on OWMS Deep Subsurface Access
- Produced figures for OWMS mission proposal
- Designed drivetrain and level wind for Deep Subsurface Access Probe
- Aided in design of Deep Subsurface Access Probe Sample Transfer Mechanism

### **UCSB Robotics Laboratory** (Undergraduate Researcher) — 2015–Present

- Advised by Professor Katie Byl
- Designed roller skates to increase locomotive speed of RoboSimian
- Designing feet with gecko adhesive pads for Boston Dynamics LittleDog robot

### **NASA Jet Propulsion Laboratory** (Robotics Intern) — Summer 2014

- Aided in the design of the Cam Hand for the JPL DRC entry RoboSimian
- Conducted experiments to learn the behavior of gecko adhesive pads after many cycles
- Aided in design of stewart platform for testing an astroid gripper in zero-g

## Activities

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### **FIRST Robotics, Suit Bots 4628** (Mentor) — 2011–Present

- Presented on success metrics for engineering at 2016 kickoff
- Helped students learn how to use SolidWorks
- Team member 2011–2015, Team Captain 2015, Business Manager 2014

## Education

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### **University of California, Santa Barbara**, expected graduation 2019

- Majoring in Mechanical Engineering
- Relevant coursework includes Writing 50E, proposal writing for engineers and ME 12S, intro machine shop

## Skills and Interests

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- Experience with SolidWorks CAD and PDM
- Certified for traditional machining at the UCSB machine shop
- DFM for 3-D printing, laser cutting, and traditional machining
- Programming in C++, Python, Matlab,  $\text{\LaTeX}$ , and Mathematica
- CPR Pro and Wilderness First Aid certified

## Awards

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- UCSB Engineering Writing Program Excellence Award for Multimedia Writing for Optical Payload for Lasercomm Science Wikipedia Article
- Louis Armstrong Award
- Eagle Scout Rank, Boy Scouts of America