

Fletcher Porter

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Employment

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 Deep Subsurface Access probe
- 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

FIRST Robotics (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

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

- 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, \LaTeX , and Mathematica
- CPR Pro and Wilderness First Aid certified

Awards

- 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