Fletcher Porter

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

Education

University of California, Santa Barbara (UCSB) • Graduation 2019

- B.S. in Mechanical Engineering
- Relevant coursework: Writing 50E, proposal writing for engineers; ME 12S, intro machine shop; ME 14, Statics; ME 15, Strength of Materials; ME 16, Dynamics (expected); ME 6, Circuits
- Won the UCSB Engineering Writing Program Excellence Award for Multimedia Writing for Optical PAyload for Lasercomm Science (OPALS) Wikipedia Article (20 May 2016)

Relevant Experience

- NASA Jet Propulsion Laboratory (JPL) (Robotics Intern) Summer 2016

 Performed drivetrain test on the Ocean Worlds Mobility and Sensing (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 and conference publication
- 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

NASA Jet Propulsion Laboratory (Robotics Intern) • Summer 2014

- Designed part of the Cam Hand for the JPL DARPA Robotics Challenge entry RoboSimian
- Conducted experiments to learn the behavior of gecko adhesive pads after many cycles

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

Eagle Scout Service Project • 19 Aug. 2013

- Prepared bins of emergency supplies for Wildrose Elementary School in Monrovia, Calif.
- Fundraised \$400 in supplies and donations for the project
- Led 19 people in collecting and filling the bins

Skills

- Experience with SolidWorks CAD and PDM
- Familiar with design for and operation of tradition machining equipment and 3-D printing
- Capable programming in C++, Python, Matlab, LATEX, and Mathematica

Awards

- Coauthor on A Deep Subsurface Ice Probe for Europa, publication pending in IEEE Aerospace Conference proceedings, March 2017
- Eagle Scout Rank, Boy Scouts of America (30 Oct. 2014)

A portfolio of my work can be found at http://portfolium.com/fporter