

Fletcher Porter

Monrovia, CA • 626-321-6687 • fporter@umail.ucsb.edu • <http://fletcherporter.com> • Class of 2019

Employment

NASA Jet Propulsion Laboratory (Robotics Intern) — Summer 2014

- Researched cam-based robotic manipulator for use on a **DARPA** robot
- Designed ventilation system for the in-lab laser cutter
- Conducted experiments to learn the behavior of **gecko adhesive pads** after many cycles
- Aided in design of stewart platform for use in zero-g testing

Activities

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

- Team member, 2011–2015; Team Captain 2015; Business Manager 2014
- Led design of competition robot
- Wrote autonomous programs using encoders and line detection to improve repeatability
- Managed finances and fundraised \$4,000 for the team
- Designed and tested a mount to attach phones to robots, DFM for CNC and injection moulding

Boy Scout Troop 147 (Eagle Scout) — 2008–2015

- Senior Patrol Leader at three consecutive summer camps
- Patrol Leader of Eagle Patrol for two years
- Went on two 100+ km backpacking trips at Philmont Scout Ranch with leadership capacity

Monrovia High School Band (Treasurer) — 2011–2015

- French horn section leader, 2 1/2 years
- Marched in the **National Memorial Day Parade** in Washington, D.C.
- Played 2nd Horn at **Carnegie Hall**
- 1st Horn in Pasadena Youth Symphony Orchestra Philharmonic
- Study trumpet privately with **Nolan Shaheed**

Education

Monrovia High School, graduated June 2015

- AP Physics C: Mechanics; AP Physics C: E&M; AP Calculus AB; AP Chemistry; AP Statistics

University of California, Santa Barbara, expected graduation 2019

- Majoring in Mechanical Engineering

Skills and Interests

- 3-D Modeling with SolidWorks (including sheet metal, weldments)
- Rapid Prototyping with 3-D printers and laser cutters
- C and Python, proficient Documentation in engineering notebooks
- CPR Pro and Wilderness First Aid certified

Awards

- FIRST: Think Award, Inspire Award, Finalist Alliance, Gracious Professionalism Award (x4)
- Louis Armstrong Award
- Eagle Scout Rank, Boy Scouts of America
- Monrovia High School Math and Science Academy Graduate