Fletcher Porter

Monrovia, CA • 626-321-6687 • fp@suitbots.com • 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

UCSB Robotics Laboratory (Undergraduate Researcher) — 2015-Present

- Designing roller skates to increase locomotive speed of RoboSimian project
- Designing and finding applications for gecko adhesive pads

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

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