

# SARAH ANGLE

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**Education**    **B.S. Mechanical Engineering** Cornell University **Graduated May 2016**

- Graduated Magna Cum Laude, with GPA of 3.97/4.00
- Named to Dean's List all semesters

**Experience**    **Mechanical Engineer** Fitbit Advanced Product Development **July 2016 - Present**

- Worked on the Advanced Product Development team to integrate new materials and technologies into future Fitbit products.
- As the mechanical engineering lead for the Smart Materials and Advanced Materials research groups, responsible for development of all tooling and prototyping.
- Coordinated with ID and Marketing to create new products that fit our customers' needs.
- Collaborated with and visited overseas suppliers for DFM feedback on designs prior to tool kickoff.
- Designed products using traditional manufacturing methods, like forging, injection molding, and machining, and more advanced material technologies, like MIM, composites, smart materials/electronics, and premium metals.

**Mechanical Engineering Intern** Autodesk Office of the CTO **June - August 2015**

- Researched effectiveness of CAD software from design to build by imagining and making a product.
- Created customized orthotic glove actuated via servo-motor to improve dexterity and muscle memory for people with disabilities or learning new tasks.
- Designed mechanical architecture and components of robotic glove.
- Implemented electrical and software system to understand input commands and control motors.
- Used tools including 3D printers and scanners, 5 axis CNC mills, and an electronics lab.
- Presented findings on software functionality directly to product teams and CEO.

**Undergraduate Researcher** Cornell Creative Machines Lab **January 2014 - May 2015**

- Collaborated with Professor Hod Lipson and his group to design the first 3D printable actuators.
- Built experiment system and a testing apparatus to measure and demonstrate properties of a new material.
- Published a paper on findings in *Advanced Engineering Materials*.

**Engineering Intern** Columbia Gas of Massachusetts **June - August 2014**

- Worked to replace aging utility infrastructure, assisting team of 8 engineers in designing projects with a total budget of \$17 million.
- Created project plans for field construction, including maps and required materials.
- Wrote construction procedures that allowed work to be done on live gas mains.

**Skills**

**Design Software:** PTC Creo, SolidWorks, Fusion360, Inventor, AutoCAD, ANSYS, LabVIEW

**Design For:** Injection & Compression Molding, MIM, Forging, Die-Casting, CNC Machining, Composite Layup, Rapid Prototyping, Laser Cutting

**Programming:** MATLAB, C, Java, Python, Arduino, ROS

**Manufacturing:** 3D Printer (Objet, Ember, etc.), Laser Cutter, CNC Mill, Hand Lathe and Mill

**Interests**    Ultimate Frisbee, Backpacking, Road Biking, Rock Climbing, Backcountry Skiing, Live Music, Guitar