# ANDY COHEN

(434) 906 0298 – acohen8@vt.edu – acohen8.weebly.com – linkedin.com/in/acohen8

## SUMMARY

Interest and experience in robotics, additive manufacturing, biomedical engineering, entrepreneurship

## EDUCATION

**Bachelor of Science in Mechanical Engineering** — Expected graduation May 2018
Virginia Polytechnic Institute and State University — Blacksburg, VA
**GPA: 3.96/4.00**, Honors College — Minors in Eng. Science and Mechanics and Biomedical Eng.

## RELEVANT EXPERIENCE

**Mechanical Engineering Department, Virginia Tech | Blacksburg, VA**
***Student Ambassador*** — ***April 2016-Present***

- Showcase MechE department at informational sessions and recruiting events
- Communicate opportunities within VT MechE to prospective, incoming students

**Design, Research, and Education for Additive Manufacturing Systems (DREAMS) Laboratory | Blacksburg, VA**
***Undergraduate Researcher*** — ***Oct 2015-Present***

- Fabricate multi-material, micron-scale structures by augmenting existing mask projection micro-stereolithography (μSLA) machine with multi-material capability
  me.vt.edu/dreams/fabrication-of-multi-material-structures-using-microstereolithography/

**BioactiVT Biomedical Design Team | Blacksburg, VA**
***Vice President of Project Growth*** — ***Oct 2014-Present***

- Direct the transition from engineering design project to marketable product
- Designed, prototyped low-cost pulse oximeter for resource-poor settings: acohen8.weebly.com/tempo
- Drafted business plan, pitch for start-up based on pulse-ox (see Union Innovation Challenge awards)

**Dynamical Systems and Control Laboratory, Johns Hopkins University | Baltimore, MD**
***REU Student Researcher: NSF Grant EEC - 1460674*** — ***May 2016-Aug 2016***

- Designed new remotely operated vehicle (ROV) for underwater navigation and control research
- Coded Robotic Operating System (ROS) node for onboard pressure sensor: acohen8.weebly.com/rov

**Frith Freshman Design Laboratory, Virginia Tech | Blacksburg, VA**
***Undergraduate Lab Assistant*** — ***Jan-Dec 2015***

- Assisted students with design and manufacture of products using fabrication technologies
- Trained students on Universal laser system, uPrint 3D printers, and design for manufacturing

**Mechanical and Aerospace Engineering Department, University of Virginia | Charlottesville, VA**
***Research Assistant*** — ***June-Aug 2015***

- Retrofitted ShopBot PRSAlpha CNC system with improved hardware, wiring, and Mach 4 user interface
- Created technical documentation on the system and its installation: acohen8.weebly.com/shopbot

**Terrestrial Robotics Engineering and Controls (TREC) Lab, Virginia Tech | Blacksburg, VA**
***Undergraduate Volunteer*** — ***Aug 2014-May 2015***

- Designed and modeled parts for humanoid robots using Inventor, Unigraphics/Siemens NX
- Manufactured parts using CNC machining, other fabrication technologies

## SKILLS & RELEVANT COURSEWORK

| | | | | | |
|---|---|---|---|---|---|
| **CAD/Fabrication** | SolidWorks | Inventor | CNC | Laser cutting | Soldering |
| **Programming** | C++ | ROS | Matlab | Git | Linux |
| **Courses** | Mechatronics: ME 4735 | | Rapid Prototyping: ME 4644 | | Biomechanics: BMES 4984 |

## AWARDS

- Fan Favorite and 2nd Place awards at Union Innovation Challenge, 2016
- NBT Scholarship, Fabricators and Manufacturers Association, 2016
- Deborah and Daniel Tillotson Scholarship, VT Mechanical Engineering, 2016
- HC and Terry Yu Scholarship, VT Mechanical Engineering, 2016
- Academic Merit Scholarship, University Honors, 2016
- 2nd Place, Engineering World Health Design Competition, 2015