Corey Spohn

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1286 Auburn Grove Lane
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RESEARCH EXPERIENCE

Research Assistant for The NIFI Group, Virginia Tech · Jan 2017-Present
- Designed and carried out experiments to study passive anti-frosting surfaces and the mechanics of inter-droplet ice bridging.
- Wrote Python applications to speed up research calculations and data processing.
- Conducting further experiments and preparing to present at the APS DFD 2017 conference.

Team Leader for Robotics Capstone Design Project, Virginia Tech · Mar 2017-Present
- In charge of meetings, programming, communicating with advisers, and resolving team disputes.
- Researching and writing a Python human-robot interaction model that predicts crowd movements in response to robotic intervention during a panic situation.
- Building robots that use pursuit/evasion algorithms and motion tracking to play Sharks and Minnows with humans in order to test our human-robot interaction model.

Research Assistant for The Socha Lab, Virginia Tech · 2016
- Used a 3d motion capture system to analyze how flying snakes cross gaps between branches.

LABORATORY EXPERIENCE

Mechanics Lab, Virginia Tech · 2017
- Performed experiments and signal processing to measure strain, pressure, temperature, and acceleration using both National Instruments and Arduino systems.
- Autonomously engineered a small Arduino system to alert cyclists of approaching cars.

Mechanics of Materials Lab, Virginia Tech · 2016
- Performed tensile, fracture, compressive, and other tests on polymers and metals using Instron and MTS testing machines.

Fluid Mechanics Lab, Virginia Tech · 2016
- Performed drag tests on various bodies, flow analysis, and scientific writing.

EDUCATION

B.S. Engineering Science and Mechanics, Virginia Tech · Graduating May 2018
B.S. Physics, Virginia Tech · Graduating May 2018
Minors: **Math, Astronomy**
GPA: **3.74**

COMPUTER SKILLS

Intermediate Knowledge	Python, Arduino, Mathematica, MATLAB, Microsoft Office
Working Knowledge	C, C++, HTML, Inventor, GitHub, LaTeX
Public Projects	github.com/CoreySpohn

SCHOLARSHIPS AND HONORS

Hugh D. Ussery Physics Scholarship · 2017
- Awarded for excellence in scholarship and a promising career.

3 Time Awardee of Robert C. Richardson Physics Scholarship · 2014, 2015, and 2016
- Awarded for academic talent, responsibility, and industry.

Sigma Pi Sigma Physics National Honors Society · 2016

Eagle Scout · 2012

OTHER WORK AND VOLUNTEER EXPERIENCE

Preschool Teacher, Reston Children's Center · 2014-Present
- Work as a substitute teacher for 2-5 year-olds while on break from school.
- Volunteer when no substitute is required.

Volunteer, C-Tech[2] · 2017
- Demonstrated my research with the NIFI Group for high school students.

Food Technician, Virginia Tech Dining Services · 2014-2015
- Trained in customer service and delivered quality service in a fast paced environment.