## College Address:

11500 K Foxtrail Lane Blacksburg, VA 24060

# Corey Spohn

#### Permanent Address:

1286 Auburn Grove Lane Reston, VA 20194

# 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

Minors: Math, Astronomy

GPA: 3.74

Graduating May 2018

## COMPUTER SKILLS

Intermediate Knowledge | Python, Arduino, Mathematica, MATLAB, Microsoft Office

Working Knowledge | C, C++, HTML, Inventor, GitHub, ™EX

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 2016

## 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.

#### Food Technician, Virginia Tech Dining Services

2014-2015

•Trained in customer service and delivered quality service in a fast paced environment.