# BEN SCHWENNESEN

(703) 258-9425 | bas65@duke.edu | 7766 Royal Sydney Drive, Gainesville, VA 20155 http://bschwenn.com | https://github.com/bschwenn | https://www.linkedin.com/in/bschwenn/

## **EDUCATION**

### Duke University, Bachelor of Science

August 2015 – May 2019

Majors: Computer Science and Mathematics

Overall GPA: 3.933/4.0 | Computer Science GPA: 4.0/4.0 | Mathematics GPA: 3.9/4.0

Relevant Coursework: Software Design and Development, Operating Systems, Numerical Analysis,

Artificial Intelligence, Data Structures and Algorithms, Discrete Math, Computer Architecture,

Multivariable Calculus, Linear Algebra, Complex Analysis, Probability, Differential Geometry

# **EXPERIENCE**

#### Airbnb, San Francisco, CA

May 2018 – August 2018

Software Engineering Intern - Test Infrastructure

- Built a tool for making changes across multiple repositories and projects automatically. This tool greatly reduces, for example, the time required to update configuration, CI checks, or common dependencies. The tool was written in Ruby and utilized Docker for containerization of various tasks.

## The Aerospace Corporation, Chantilly, VA

May 2017 – August 2017

Software Engineering Intern - Software Systems and Acquisitions

- Designed and prototyped a system that automatically reconstructs the architecture of complex software systems hosted in the cloud using Elasticsearch, Fluentd, MySQL, and Python.
  - Created a visualization layer using JavaScript libraries including jQuery, D3, and JointJS.
  - This system partially automated the tedious task of verifying that contractors met delivery requirements agreed on with the government.
- Built a static analysis tool that improved the speed of VHDL code reviews by about 30% by automating tasks formerly performed by experienced engineers. The tool was written in Python.

### Duke University, Durham, NC

August 2017 – May 2018

*Undergraduate Teaching Assistant - Department of Computer Science* 

- Served as a teaching assistant for computer architecture and software design courses.
- Responsible for leading labs, holding office hours, and grading coursework.
- Topics included: Software design, UNIX/Linux, C and assembly programming, logic design, pipelining, data representations and storage, virtual memory

#### Fugua School of Business. Durham, NC

August 2015 – May 2017

Research Assistant – Finance Department

- Scraped large datasets containing over 5 million records from various sources on the web, primarily using Python; performed regression and statistical analyses on the datasets using Stata
- Topics of research included but were not limited to: financial technology, hedge fund activism, and corporate culture and governance.

### Duke University, Durham, NC

October 2016 – March 2017

Research Assistant – Department of Mathematics

- Researched methods to automate the repair of models of human nasal passages in the form of triangular meshes, specifically the removal of toroidal holes and other noise.

### SKILLS

**Programming Languages:** Java (*primary*), Ruby, Python, C, JavaScript, MATLAB, Bash

Technologies: Git, Docker, Kubernetes, Elasticsearch, AWS, HTML, CSS, Relational Databases, UNIX