# SOPHIE SMITH

sophiesmith.me
sophiesm@andrew.cmu.edu
(518) 477-0738
LinkedIn: /smith-sophie    GitHub: /sophie-smith

## EDUCATION

**BS in Computer Science, May 2021**

Carnegie Mellon University, Pittsburgh, PA
Concentration in Computer Systems
GPA: 3.43/4.00

**High School Diploma, June 2017**

Saratoga Springs High School, Saratoga Springs, NY

## RELEVANT COURSEWORK

Parallel Computer Architecture and Programming* (15-418)
Software Foundations of Security and Privacy* (15-316)
Introduction to Computer Security* (15-330)
Computer Systems (15-213)
Functional Programming (15-150)
Imperative Programming (15-122)
Theoretical Computer Science (15-251)
Parallel and Sequential Data Structures
and Algorithms (15-210)
Computer Vision (16-385)
Introduction to Machine Learning (10-315)

* In progress

## SKILLS

Languages:
(Proficient) C, SML, Python
(Familiar) C#, Java, R, MATLAB

Tools and Frameworks:
LaTeX, Git, Vim

## PROJECTS

**Dynamic Memory Allocator, July 2018**

- Implemented a dynamic memory allocation system with C for a computer systems course at Carnegie Mellon University
- Optimized the data structure used for storage methods to maximize throughput and memory utilization

**Comparison of Social Factors versus per Capita GDP, August 2016 - May 2017**

- Used R to perform k-means clustering, partitioning, and exploratory data analysis to analyze the relationship between socioeconomic variables and GDP in 79 countries
- Placed second in the Behavioral Sciences category at the Upstate New York Junior Science and Humanities Symposium (JSHS)
- Competed at the 55th National JSHS in San Diego, CA

## EXPERIENCE

**Explorer Intern at Microsoft, May 2019 - Present**

System Center Configuration Manager Engineering Team
- Implemented various accessibility and UI improvements for System Center Configuration Management software to aid OS Deployment tasks performed by IT Admin
- Features developed included adding searching and filtering across Task Sequence Editor steps and improving functionality for modifying conditional statements

**Teaching Assistant, January 2019 - Present**

Introduction to Computer Systems (15-213/18-213/18-613), Carnegie Mellon University
- Led recitations for graduate and undergraduate students to help teach fundamentals of Computer Systems
- Wrote exam questions for midterm and final exam
- Held office hours to help students on course assignments and conceptual understanding of the course material

**Undergraduate Research Assistant**

Institute for Software Research, Carnegie Mellon University (May 2018 - June 2019)

- Predicted users likely to propagate fake information across Twitter users using label propagation and graph-based convolutional neural networks
- Improved algorithm by forming a network of users via mentions, retweets, quotes and replies and by analyzing tweet meta-data included in their posts

CREATE Lab, Carnegie Mellon University (September 2018 - May 2019)

- Transcribed videos from artificial intelligence professionals to create a virtual archive of their opinions on the social ramifications of developments in this field
- Helped create a virtual archive of videos for public distribution

## ACTIVITIES

- Women in Computer Science at Carnegie Mellon University (2017-present), Board Member

## AWARDS

- Dean's List (Spring 2019), Carnegie Mellon University
- Second Place in Upstate NY Junior Science and Humanities Symposium, Behavioral Science Category (Spring 2017)
- Saratoga Springs Rotary Club Presidential Scholarship award recipient (Spring 2017)