SOPHIE SMITH

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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

Computer Systems (15-213)
Parallel Computer Architecture and Programming* (15-418)
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)
Software Foundation of Security and Privacy* (15-316)

* In progress

SKILLS

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

Tools and Frameworks:
LaTeX, Git, Vim

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)

EXPERIENCE

Explorer Intern at Microsoft, May 2019 - Present

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 material

Undergraduate Research Assistant

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

- Predicted users likely to propagate fake information across Twitter users using label propagation and graph-based convolutional neural networks
- Improved algorithm by connecting users via mentions, retweets, quotes and replies and by analyzing reachability of websites attached to their posts

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

- Transcribe 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

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