SOPHIE SMITH

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EDUCATION

BS in Computer Science, May 2021

Carnegie Mellon University, Pittsburgh, PA
Concentration in Computer Systems
GPA: 3.54/4.00

High School Diploma, June 2017

Saratoga Springs High School, Saratoga Springs, NY

RELEVANT COURSEWORK

Operating Systems* (15-410)
Algorithm Design and Analysis* (15-451)
Parallel Computer Architecture and Programming (15-418)
Software Foundations of Security and Privacy (15-316)
Introduction to Computer Security (15-330)
Computer Vision (16-385)
Introduction to Machine Learning (10-315)

* In progress

SKILLS

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

APIs and Frameworks:
Open MP, MPI

PROJECTS

Parallel Optical Flow Analysis and Object Tracking

- Improved speed of optical flow tracking using Lucas-Kanade algorithm for 15-418 final project
- Used Open MP, MPI and CUDA frameworks to achieve up to 27x speedup

AWARDS

- Dean's List (Spring 2019, Fall 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)

ACTIVITIES

- Women in Computer Science at Carnegie Mellon University (2017-2019), Board Member

EXPERIENCE

Incoming Software Engineering Intern at Microsoft, May 2020 - August 2020

Azure Cosine (Core OS and Intelligent Edge)

Explorer Intern at Microsoft, May 2019 - August 2019

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
- Shipped four features to customers including search and filtering across Task Sequence Editor steps and improving functionality for modifying conditional statements

Teaching Assistant, January 2019 - December 2019

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

Optimization, Probability and Learning Lab, Parallel Data Lab, Carnegie Mellon University (November 2019 - Present)

- Used rateless coding techniques to optimize matrix multiplication in parallel
- Limited data replication while ensuring computations resistant to data loss and node failure

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

- Predicted users likely to propagate fake information across Twitter 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