SOPHIE SMITH

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)

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 sophiesmith.me sophiesm@andrew.cmu.edu (518) 477-0738

Linkedln: /smith-sophie GitHub: /sophie-smith

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, Carnegie Mellon University (November 2019 - Present)

 Worked to optimize distributed machine learning computations on serverless computing platforms using rateless coding techniques

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

^{*} In progress