SOPHIE SMITH

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LINKEDIN: /SMITH-SOPHIE
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EDUCATION

Carnegie Mellon University

M.S. in Computer Science

Expected December 2021

B.S. in Computer Science

Concentration in Computer Systems
GPA: 3.46/4.00
Expected December 2020

Saratoga Springs High School

High School Diploma, June 2017

RELEVANT COURSEWORK

Operating Systems (15-410)
Computer Networks* (15-441)
Storage Systems* (15-746)
Computer Architecture* (15-740)
Introduction to Security (15-330)
Software Foundations of Security and
Privacy (15-316)
Parallel Computer Architecture and
Programming (15-418)

* In Progress (Fall 2020)

SKILLS AND ABILITIES

Languages:
(Proficient) C, Python
(Familiar) C++, C#, Matlab

AWARDS & ACTIVITIES

Dean's List (Spring 2019, Fall 2019)
Women @ SCS Committee, 2017-2019
Saratoga Springs Rotary Scholarship (2017)

PROJECTS

Parallel Object Tracking
- Implemented object tracking via Lucas-Kanade
optical flow algorithm for 15-418 final project
- Used OpenMP, MPI and CUDA frameworks to
increase speedup to up to 27x

INDUSTRY EXPERIENCE

Software Engineering Intern

Microsoft (May 2020 - August 2020)

SiGMa, Azure Cosine

Explore Intern

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 Windows IT Administrators
- Shipped four features to allow search and filtering of Task
Sequence Editor steps and assistance in modifying conditionals

ACADEMIC EXPERIENCE

Teaching Assistant @ Carnegie Mellon University

Introduction to Computer Systems, 15-213/18-213/18-613/15-513 (Spring 2019, Fall 2019, Summer 2020)

- Led recitations for graduate and undergraduate students to help
teach fundamentals of computer systems
- Held office hours to help students on course assignments and
conceptual understanding of the course material
- Wrote exam questions for midterm and final exam

Research Assistant @ Carnegie Mellon University

Optimization, Probability and Learning Lab (December 2019 - Present)

- Work on optimizing distributed machine learning computations on
serverless computing platforms
- Use error-correcting codes to mitigate the effect of straggling
workers

Center for Computational Analysis of Social and Organizational Systems (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 (September 2018 - May 2019)

- Transcribed interview 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
(aiandhumanity.org)