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)
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, SML, Python
(Familiar) C#, Java, R, MATLAB

Tools and Frameworks:
LaTeX, Git, Vim

PROJECTS

Parallel Optical Flow Analysis Using Lucas-Kanade
Algorithm
- Final project for 15-418 course
- Optimized optical flow tracking algorithm using Open
  MP, MPI and CUDA

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-present), 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 - 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

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