Mary Hogan

CONTACT INFORMATION

Computer Science Department
Oberlin College
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RESEARCH INTERESTS

Networked systems, with an emphasis on programmable networks

EDUCATION

Princeton University **September 2018 - May 2024**

- Ph.D. and M.A. in Computer Science
- Advisor: Prof. Jennifer Rexford
- Thesis: Language Expressiveness Under Extreme Scarcity in Programmable Data Planes
- Courses: Advanced Computer Networks, Advanced Algorithm Design, Programming Languages, Network Verification, Theoretical Machine Learning, Wireless Networks

Saint Louis University **August 2013 - May 2017**

- B.S. in Computer Science
- Minors in Mathematics, Business Administration
- 3.93/4.00 cumulative GPA, *summa cum laude*

PROFESSIONAL EXPERIENCE

Oberlin College **July 2024 - current**
Computer Science Department
Assistant Professor

Microsoft Research **May 2022 - July 2022**
Research Intern, Azure for Operators
Mentors: Sharad Agarwal, Ryan Beckett, Rachee Singh

Saint Louis University **February 2018 - August 2018**
Research Assistant
Supervisor: Flavio Esposito

RedCard Systems **June 2017 - February 2018**
Associate Software Developer

PUBLICATIONS

Modular Switch Programming Under Resource Constraints
Mary Hogan, Shir Landau Feibish, Mina Tahmasbi Arashloo, Jennifer Rexford, David Walker. *The Nineteenth USENIX Symposium on Networked Systems Design and Implementation (NSDI 2022)*, April 2022.

Elastic Switch Programming with P4All
Mary Hogan, Shir Landau Feibish, Mina Tahmasbi Arashloo, Jennifer Rexford, David Walker, Rob Harrison. *The Nineteenth ACM Workshop on Hot Topics in Networks (Hotnets 2020)*, November 2020.

Music-Defined Newtorking
Mary Hogan, Flavio Esposito. *The Seventeenth ACM Workshop on Hot Topics in Networks (Hotnets 2018)*, November 2018.

Stochastic Delay Forecasts for Edge Traffic Engineering via Bayesian Networks
Mary Hogan, Flavio Esposito. *The Sixteenth IEEE International Symposium on Network Computing and Applications (NCA 2017)*, October 2017.

Poster: A Portfolio Theory Approach to Edge Traffic Engineering via Bayesian Networks
Mary Hogan, Flavio Esposito. Poster session at *The Twenty-Third ACM International Conference on Mobile Computing and Networking (MobiCom 2017)*, October 2017.

Teaching Experience

Oberlin College
CSCI 241: Systems Programming — Fall 2024

Mercer County Community College (Adjunct Faculty)
COS101: Intro to Computer Science — Fall 2023

Princeton University (Teaching Assistant)
COS561: Advanced Computer Networks — Fall 2020
COS316: Principles of Computer System Design — Fall 2019, Spring 2022

Professional Service

Program Committee Member
ACM SIGCOMM Poster Session — 2023-2024

External Reviewer for Journal
IEEE/ACM Transactions on Networking (ToN) — 2023

Invited Talks

P4All: Enabling Parameterized Description of Data-Plane Algorithms
Network Programming Initiative Annual Retreat, October 2019

Awards and Honors

- Princeton GradFUTURES Teaching Fellowship, 2023
- Travel Grant for ACM MobiCom, Oct 2017