

AMANDA C. HSU

achsu3.github.io

EDUCATION

Georgia Institute of Technology

Ph.D. in Computer Science

Advisors: Professor Paul Pearce, Professor Frank Li

Expected Graduation: August 2026

University of Illinois at Urbana-Champaign

B.S. Computer Engineering, with Honors

May 2021

PUBLICATIONS

1. *The Impact of IP Version on Household Internet Speed: A Comparative Study*
Amanda Hsu, Nick Feamster, Paul Pearce, Frank Li
2026 ACM SIGMETRICS (to appear)
2. *6SENSE: Internet-Wide IPv6 Scanning and its Security Applications*
Grant Williams, Mert Erdemir, **Amanda Hsu**, Shraddha Bhat, Abhishek Bhaskar, Frank Li, Paul Pearce
USENIX Security Symposium 2024
3. *A First Look At NAT64 Deployment In-The-Wild*
Amanda Hsu, Frank Li, Paul Pearce, Oliver Gasser
Passive and Active Measurement Conference (PAM) 2024
4. *Fiat Lux: Illuminating IPv6 Apportionment with Different Datasets*
Amanda Hsu, Frank Li, Paul Pearce
2023 ACM SIGMETRICS
5. *Revisiting Client Puzzles for State Exhaustion Attacks Resilience*
Mohammad A. Nouredine, Ahmed M. Fawaz, **Amanda Hsu**, Cody Guldner, Sameer Vijay, Tamer Başar, William H. Sanders
IEEE/IFIP International Conference on Dependable Systems and Networks (DSN) 2019
6. *P4 AIG: Circuit-Level Verification of P4 Programs*
Mohammad A. Nouredine, **Amanda Hsu**, Matthew Caesar, Fadi A. Zaraket, William H. Sanders
IEEE/IFIP International Conference on Dependable Systems and Networks (DSN) 2019

FELLOWSHIPS

- ARIN 55 Fellow *2025*
- Graduate Research Fellowship Program (GRFP), *National Science Foundation (NSF)* *2022*
- Herbert P. Haley Fellowship, *Georgia Institute of Technology* *2022*
- President's Fellow, *Georgia Institute of Technology* *2021*

TEACHING EXPERIENCE

Teaching Assistant **CS6250 - Graduate Networks**

August 2024 - December 2024

- Instructor: Professor Alberto Dainotti

Teaching Assistant **CS8803 - Securing Internet Infrastructure**

January 2023 - May 2023

- Instructor: Professor Cecilia Testart

INVITED TALKS

- IETF 120 (MAPRG): A First Look At NAT64 Deployment In-The-Wild *July 2024*

INDUSTRY EXPERIENCE

Research Intern **Akamai** *May 2025 - August 2025*

- Implemented method of shared IP technology (including NAT, proxies, VPNs) detection based on traffic patterns.

Research Intern **Censys** *May 2021 - August 2021*

- Designed and implemented methods of HTTP scanning to attribute domains, IP addresses, and certificates to organizations.

Software Engineering Intern **Censys** *May 2020 - August 2020*

- Improved attribution system that utilizes Internet-wide scan data to associate assets including hosts, certificates, and domains, to customers.
- Contributions include API development in Go and Python as well as database management.

Non-Volatile Memory Firmware Validation Intern **Intel Co.** *May 2019 - August 2019*

- Developed Python scripts to collect data to standardize test system setup, including hardware and software specifications.
- Reduced false-negatives on firmware validation tests.

Analyst Intern, Independent Contractor **Bellwether Analytics** *June 2018 - March 2019*

- Built applications to create precise market landscapes which were used to advice R&D departments of various pharmaceutical companies.

PROFESSIONAL SERVICE

- External Reviewer, IEEE S&P 2025
- Student Volunteer, NSF NeTs Early Career Workshop 2025
- Lead Student Organizer, ACM SIGCOMM 2021
 - Presented Student Welcome Session for all students attending SIGCOMM 2021
 - Collaborated with professionals in the SIGCOMM community to compile content relevant to students attending academic conferences
- Student Program Committee Volunteer, ACM SIGCOMM 2021
 - Assisted in technical logistics of the 2-day-long review of paper submissions to SIGCOMM 2021
- External Reviewer, USENIX NSDI 2021
- Student Organizer, ACM SIGCOMM 2020
- External Reviewer, ACM CCS 2020

LEADERSHIP AND EXTRACURRICULAR EXPERIENCES

Founding Coordinator, Georgia Tech Networks Community *August 2022 - May 2023*

- Co-founded an interdisciplinary group of students and faculty in networks research
- Fostered social and professional connections between researchers at Georgia Tech

Society of Women Engineers, UIUC

August 2017 - May 2021

- President (2020-21)
- Treasurer (2019-20)

AWARDS

- Community Engagement Award, *School of Computer Science, Georgia Institute of Technology* 2023
- Knights of St. Patrick Award for Leadership, *University of Illinois at Urbana-Champaign* 2021
- PricewaterhouseCoopers Grace Hopper Scholar 2018
- North Shore Community Service Award for Extra Effort 2017

Travel Grants

- ACM Internet Measurement Conference (IMC) 2023
- ACM SIGMETRICS Conference 2023
- ACM Internet Measurement Conference (IMC) 2022