

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. *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

2. *A First Look At NAT64 Deployment In-The-Wild*

Amanda Hsu, Frank Li, Paul Pearce, Oliver Gasser

Passive and Active Measurement Conference (PAM) 2024

3. *Fiat Lux: Illuminating IPv6 Apportionment with Different Datasets*

Amanda Hsu, Frank Li, Paul Pearce

2023 ACM SIGMETRICS

4. *Revisiting Client Puzzles for State Exhaustion Attacks Resilience*

Mohammad A. Noureddine, 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

5. *P4 AIG: Circuit-Level Verification of P4 Programs*

Mohammad A. Noureddine, **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

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 advise 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