

# AMANDA C. HSU

achsu3.github.io

## EDUCATION

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### 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

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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. 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*
5. *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

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- 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

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### 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

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

*July 2024*

## INDUSTRY EXPERIENCE

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### *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

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- 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

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### **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

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- 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