Andrew Chu

Ph.D. Student
University of Chicago

Office: John Crerar Library, Room 269
Email: andrewcchu@uchicago.edu
Homepage: https://andrewcchu.github.io/

RESEARCH INTERESTS

My research focuses on exploring machine learning for problems in computer networking, specifically towards developing tools for analyzing and improving networked computer systems. I build systems to understand network traffic dynamics better and use this perspective to collect data more representative of real-world networks, targeting (i) data diversity and (ii) the availability of high-quality network data. In particular, my work examines using various machine learning (ML) based methods for these two challenges, as well as what data granularity different problems in the ML for computer networking space require to be approached effectively.

EDUCATION

Degree	Year	University	Field
Ph.D.	2021—	University of Chicago Chicago, IL	Computer Science
M.S.	2023	University of Chicago Chicago, IL *Thesis:* Transformer Models for Protocol Analysis: A Case Study in TLS *Advisor:* Nick Feamster *Committee:* Junchen Jiang, Sanjay Krishnan	Computer Science
B.S.	2020	Purdue University West Lafayette, IN	Computer Science

PUBLICATIONS

Conference Proceedings

[1] **Feasibility of State Space Models for Network Traffic Generation**
Andrew Chu*, Xi Jiang*, Shinan Liu, Arjun Bhagoji, Francesco Bronzino, Paul Schmitt, and Nick Feamster
ACM SIGCOMM Workshop on Networks for AI Computing (NAIC), Aug. 2024

[2] **The Dark Side of E-Commerce: Dropshipping Abuse as a Business Model**
Arjun Arunasalam*, Andrew Chu*, Muslum Ozgur Ozmen, Habiba Farrukh, and Z. Berkay Celik
Network and Distributed System Security Symposium (NDSS), Feb. 2024

[3] **Behind the Tube: Exploitative Monetization of Content on YouTube**
Andrew Chu*, Arjun Arunasalam*, Muslum Ozgur Ozmen and Z. Berkay Celik
USENIX Security Symposium, Aug. 2022

[4] **Discovering IoT Physical Channel Vulnerabilities**
Muslum Ozgur Ozmen, Xuansong Li, Andrew Chu, Z. Berkay Celik, Bardh Hoxha, and Xiangyu Zhang
ACM Computer and Communications Security (CCS), Nov. 2022

TEACHING

2024	**Teaching Assistant**, CMSC 30254: Machine Learning for Computer Systems University of Chicago
2024	**Teaching Assistant**, CMSC 33260: Internet Censorship and Online Speech University of Chicago

2021   **Teaching Assistant**, CMSC 28400: Intro to Cryptography
University of Chicago

AWARDS

2021   NSF GRFP Honorable Mention

EXPERIENCE

2017–21   Year-Round Intern, R&D — **Sandia National Laboratories**

Last updated: July 17, 2024[1]

---

[1]CV inspired by Geoff Boeing and Nick Feamster.