Alexandra Nisenoff

nisenoff@cmu.edu | anisenoff.github.io

EDUCATION

Carnegie Mellon University   **August 2022 — Present**
Ph.D. student, Societal Computing   Pittsburgh, PA
Advisors: Nicolas Christin and Lorrie Faith Cranor

University of Chicago, Summa Cum Laude   **September 2017 — June 2021**
B.S. in Computer Science (specialization in computer security)   Chicago, IL
B.A. Astrophysics
Overall GPA: 3.737

RESEARCH

University of Chicago, Department of Computer Science, SUPERgroup   **July 2019 — August 2022**
Research Assistant for Prof. Blase Ur   Chicago, IL

- Lead project investigating the different ways that tracking protection tools can cause websites to function incorrectly through a user study and qualitative coding of user reviews
- Parsed over 1TB of data breaches, performed password transformations, and analyzed data for a study on password reuse
- Created a targeted guessing algorithm to guess a user's 6-digit PIN after "upgrading" from a 4-digit PIN
- Oversaw three undergrads on various projects

University of Chicago, Data Science Institute   **August 2020 — July 2022**
Research Assistant for Prof. Nick Feamster   Chicago, IL

- Designing and coordinating user study on encrypted DNS settings on mobile devices and in browsers
- Providing training on LaTeX and Qualtrics to high school research assistant

University of Chicago, Department of Astronomy and Astrophysics   **October 2019 — December 2022**
Research Assistant for Prof. Vikram Dwarkadas   Chicago, IL

- Designing and building an online database for radio supernova data (PHP, MySQL, and JavaScript)
- Updated Supernova X-Ray Database to be compatible with a newer version of PHP and fixed preexisting XSS vulnerabilities

Max Planck Institute for Security and Privacy   **June 2021 — September 2021**
Human Factors in Security and Privacy Group   Remote
Research Assistant for Prof. Yasemin Acar

- Created a selenium testing framework for a large scale internet measurement study on the issues that occur when password managers interact with websites

University of Chicago Department of Geophysical Sciences   **June 2018 — March 2019**
Lab Technician for Prof. Elisabeth Moyer   Chicago, IL

- Optimized data reduction program in IDL, decreasing runtimes by over 95% on typical output files
- Operated laser spectrometer to gather water isotopologue ratios in the atmosphere Implemented additional software capabilities for the spectrometer into existing LabVIEW code

PRESENTATIONS & PUBLICATIONS

Peer-Reviewed Publications

- Collins Munyendo, Philipp Markert, **Alexandra Nisenoff**, Miles Grant, Elena Korkes, Blase Ur, Adam Aviv. *"The Same PIN, Just Longer:" On the (In)Security of Upgrading PINs from 4 to 6 Digits*. 2022. USENIX Security.
- **Alexandra Nisenoff**, Nick Feamster, Madeleine A Hoofnagle, Sydney Zink. *User Expectations and Understanding of Encrypted DNS Settings*. 2021. NDSS DNS Privacy Workshop.

Other

- **Alexandra Nisenoff**, Vikram V. Dwarkadas, Mathias C. Ross. *Supernova X-Ray Database (SNaX) Updated to Ensure Long-term Stability*. 2020 Res. Notes AAS 4 195.

Fellowships & Grants

National Science Foundation Graduate Research Fellowship 2022
Dean's Fund Grant, $1,500 UChicago grant for research expenses 2020
Jeff Metcalf Fellowship Grant, $3,750 UChicago grant for summer internships 2020
Diversity Grant to USENIX Enigma 2020

Awards

Departmental Honors (Computer Science) 2021
Harper Award for Exceptional Performance in a Course, Engineering Interactive Electronics onto Printed Circuit Boards 2021
Enrico Fermi Scholar, GPA in top 5% of major over past 5 years (only eligible 3rd and 4th year of college) 2020 & 2021
Dean's List 2017 — 2020

Activities

University of Chicago Department of Computer Science **January — March 2021 & 2022**
Course Staff for Introduction to Computer Security ('21: 86 students, '22: 109 students) *Chicago, IL*

- Assisted with the development of computer security focused assignments
- Responded to student questions on class discussion board about computer security concepts, ran office hours, and graded assignments

Expanding Your Horizons Chicago **August 2019 — March 2022**
Organizing Committee Member *Chicago, IL*

- Organized student recruitment for annual STEM symposium for middle school girls

UChicago Maroon Newspaper **September 2017 — June 2021**
Photo Section Editor and Staff Photographer *Chicago, IL*

- Ran staff meetings, photo critiques, and handled various logistical tasks for the photo section
- Took photos at protests, guest lectures, concerts, sports events, and art exhibits
- 2019 ICPA Award for Excellence in IL College Newspapers: General News Photo 2nd place

College Core Tutor Program **January 2020 — March 2020**
Peer Tutor *Chicago, IL*

- Assisted 5-10 students per session with introductory computer science classes in Python, C, and Typed Racket

Skills

Programming	**Proficient**: Python, C, LabVIEW, and IDL
	Experienced: JavaScript, PHP, HTML/CSS, and R
Applications	Adobe Lightroom, Qualtrics, and LaTeX