Alexandra Nisenoff

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EDUCATION

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

RESEARCH

University of Chicago Department of Computer Science, SUPERgroup   July 2019 - Present
Research Assistant for Prof. Blase Ur   *Chicago, IL*
- Developing code to automate the detection of website breakage due to tracking protection tools using Python, JavaScript, Puppeteer, and Selenium
- Parsed over 1TB of data breaches and performed password transformations for study on password reuse
- Created a targeted guessing algorithm to guess a user's 6-digit PIN after "upgrading" from a 4-digit PIN

University of Chicago Center for Data and Computing   August 2020 - Present
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 - Present
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   *Virtual*
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
- **Alexandra Nisenoff**, Nick Feamster, Madeleine A Hoofnagle, Sydney Zink. *User Expectations and Understanding of Encrypted DNS Settings*. 2021. NDSS DNS Privacy Workshop.

Under Review
- 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*.

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.

- **Midstates Undergraduate Research Symposium,** Poster Presentation
  Study of UChicago Affiliates' Vulnerability to Password Guessing Attacks. Nov. 16, 2019

- **UCISTEM Undergraduate Research Symposium,** Poster Presentation
  Study of UChicago Affiliates' Vulnerability to Password Guessing Attacks. Oct. 11, 2019

AWARDS AND GRANTS

- 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 and 2021
- Dean's List, 2017-2020
- Dean's Fund Grant, *$1,500 UChicago grant for research expenses,* Fall 2020
- Jeff Metcalf Fellowship Grant, *$3,750 UChicago grant for summer internships*, Summer 2020
- Diversity Grant to USENIX Enigma, January 2020

ACTIVITIES

Expanding Your Horizons Chicago   August 2019 - Present
Organizing Committee Member   *Chicago, IL*
- Organizing 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

University of Chicago Department of Computer Science   January 2021 - March 2021
Course Staff for Introduction to Computer Security (86 students)   *Chicago, IL*
- Assisted with the development of computer security focused assignments
- Responded to student questions on class discussion board about computer security concepts and graded assignments

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, MySQL, HTML/CSS, and R

Applications:
- Proficient: Adobe Lightroom, Qualtrics
- Experienced: LaTeX, Wireshark