# Alexandra Nisenoff

# nisenoff@uchicago.edu

#### **EDUCATION**

#### **University of Chicago**

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

Relevant Classes: (Graduate level) Intro to Computer Security, (Graduate level) Topics in Computer Security, Usable Privacy and Security, Cryptography, and Foundations of Computer Networks

# RESEARCH

# **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

## 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
- Creating a Qualtrics survey and app (React Native and Expo) to understand users' mobile device PIN modification strategies

# University of Chicago Department of Astronomy and Astrophysics

October 2019 - June 2021

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

#### **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 90% 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

#### AWARDS AND GRANTS

- Summa Cum Laude, *GPA* in top 8% of major (over past 5 years) and broad engagement with the college curriculum, 2021
- Departmental Honors (Computer Science), 2021
- Dean's List, 2017-2020
- Enrico Fermi Scholar, GPA in top 5% of major (over past 5 years) at end of 3rd year, 2019-2020
- 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

#### 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.

#### **Other Publications**

• 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.

#### **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

- Run staff meetings, photo critiques, and handle various logistical tasks for the photo section
- Take 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

- Assisting with the development of computer security focused assignments
- Respond to student questions on class discussion board about computer security concepts and student specific debugging

#### **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, R, React Native, and Expo

Applications:

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