# Alexandra Nisenoff

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#### **EDUCATION**

**University of Chicago** 

September 2017 - Present

Majors, Computer Science & Astrophysics

Chicago, IL

**Expected Graduation Date, June 2021** 

Overall GPA, 3.70

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

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

## **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 DNS settings on mobile devices and in browsers

#### **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) and updated Supernova X-Ray Database
- Leading project to create audio representations of astronomical data to make astronomy more accessible to visually impaired researchers

## **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 instrument into existing LabVIEW code

#### AWARDS AND GRANTS

- Dean's List, 2017-2020
- Enrico Fermi Scholar, GPA in top 5% of major (over past 5 years) at end of 3rd year, 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

#### **Poster Presentations**

- 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

#### **Non-Refereed 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**

## **University of Chicago Department of Computer Science**

January 2021 - Present

*Grader for Introduction to Computer Security (100+ students)* 

Chicago, IL

Assisting with the development of weekly computer security focused assignments

## **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 - Present

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

## **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

#### UChicago GlassEyeball

October 2018 - March 2020

Student Organizer

Chicago, IL

• Organized and led tutorials/workshops, for 10-20 club members, on photography techniques, darkroom usage, and photo editing

#### **SKILLS**

#### Programming:

- Proficient: Python, C, LabVIEW, and IDL
- Experienced: JavaScript, PHP, MySQL, HTML, CSS, R, SML, React Native, and Expo

#### Applications:

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