

Alexandra Nisenoff

nisenoff@uchicago.edu

(808)-464-2547

EDUCATION

University of Chicago

September 2017 - Present

Majors, Computer Science & Astrophysics

Chicago, IL

Expected Graduation Date, June 2021

Overall GPA, 3.70

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
- Grading weekly reading and programming 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