

# Danielle Damon

SOFTWARE ENGINEER · MASTERS STUDENT

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## Education

### The University of Chicago

MS IN COMPUTER SCIENCE, GPA 3.67

Chicago, IL

Sep. 2020 - June. 2021

Courses: Advanced Programming in C, C++ for Advanced Programmers, Web Development, Computer Systems, Algorithms

### The University of Chicago

BA IN BIOLOGY, GPA 3.72

Chicago, IL

Sep. 2016 - June. 2020

Courses: Computer Science I-II in Python, Quantitative Modeling

## Work Experience

### Lucy Labs CryptoFinance

SOFTWARE ENGINEERING INTERN

Remote, New York

Apr. 2020 - Sep 2020

- Built a system to perform database updates and produce corresponding daily reports using Python, SQL, Bash, and Crontab.
- Automated generation of client statements and monthly reports on strategy performance using SQL and the ReportLab PDF Library in Python.
- Utilized websockets to perform data acquisition from cryptocurrency exchanges.

### The University of Chicago, Biology Department

ECOLOGY AND EVOLUTION FELLOW

Chicago, IL

Jun. 2019 - Mar. 2020

- Designed and implemented experiments to investigate butterfly electroreception.
- Analyzed data using R.

### The University of Bristol, Biology Department

RESEARCH ASSISTANT

Chicago, IL

Oct. 2018 - Jun. 2019

- Designed and conducted experiments to determine electric charge of bees within larger investigation into insect electroreception.
- Analyzed data using R and MATLAB.

## Projects

### N-Body Physics Simulation

[HTTPS://GITHUB.COM/DANIDAMON/NBODY\\_PROBLEM](https://github.com/danidamon/nbody_problem)

- Modeled the movement of particles over time using recursive quad-trees and the Barnes-Hut approximation algorithm in C.
- Created an animation of the simulation using Python, NumPy, and Matplotlib.

### Course Search Tool

CLASS PROJECT

- Developed a course search engine in Python by scraping the course catalog and returning suggestions based on user input utilizing HTML, SQL, and the Django web framework

## Skills

**Proficient Languages** Python, C, SQL

**Beginner Languages** HTML, CSS, Javascript, PHP, C++

**Frameworks** Pandas, NumPy

## Extracurricular Activity

### UROCK Climbing Club

EVENT COORDINATOR

Chicago, IL

Jan. 2017 - Jun. 2020

### Sports Finance Committee

COMMITTEE MEMBER

Chicago, IL

Sep. 2019 - Jun. 2020