

# Wesley Weisenberger

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## EDUCATION

### University of California, Berkeley

Bachelor of Arts in Computer Science, Minor in Data Science

**Expected Graduation:** May 2024

**GPA:** 3.7

**Relevant Coursework:** Full Stack Development, Data Structures, Database Systems, Computer Architecture, Computer Security, Discrete Math & Probability Theory, Efficient Algorithms & Intractable Problems, Designing Information Devices and Systems, Principles of Data Science, Data Ethics, Advanced Linux System Administration, Operating Systems (*planned*), Machine Learning (*planned*)

## WORK EXPERIENCE

### Undergraduate Research Apprentice Program

August 2022 – Present

*Data Science Student Researcher*

- Researching under Professor Johnathan Marshall in the UC Berkeley Legal Studies Department.
- Developed classifiers to identify statistical patterns and anomalies in the Old Bailey Online corpus of criminal cases in London.
- Constructed XML parsers to ensure old, irregular case data was interoperable with Pandas/NumPy.

### Open Computing Facility

Fall 2020 – Present

- Maintaining campus computing infrastructure such as web hosting, printing, and computer lab.
- Performing system administration of servers and desktops used by hundreds of students each day.
- Teach various classes on Linux techniques and skills.

## PROJECTS

### End to End Encrypted File Sharing System – Go

Spring 2023

- Designed and developed an API that allows users to upload, append to, delete, files.
- API also supports secure file sharing between users and revocation of file access.
- Custom suite of tests written to ensure that file integrity and confidentiality were maintained even after any malicious actions taken on the server.

### Discord Bot – Python

Spring 2022

- Enabled users to query images from an aggregated search engine, then manipulate, rasterize, or edit said images through text commands and macros.
- Self-hosted Docker environment facilitated error-handling and networking between Python container, search engine, and Linux system used for processing images.

### Gitlet – Java

Fall 2021

- Custom version control system modeled with functionality modeled after Git.
- Supports file tracking, branching, merging, and remote repositories.
- Implemented custom data structures to enable constant-time file lookup, hashing to handle "diffs" and to prevent file collisions, and merge conflict handling.

### Weather Station – C, HTML, Javascript

Spring 2021

- Constructed a custom battery-powered Arduino weather monitoring circuit system which pushed data to a database on a locally hosted Linux web server, accessible to the internet.
- Self-hosted website to display and visualize weather data and trends. Website also gave users the ability to pull more recent weather measurements from the device.

## TECHNICAL SKILLS

**Languages:** Python, Java, C, Go, React, Javascript/NodeJS, HTML, CSS, SQL, PHP, Swift, RISC-V Assembly

**Tools:** Git, Linux, Docker, NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn,  $\LaTeX$ , MongoDB, RegEx