Wesley Weisenberger

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EDUCATION

University of California, Berkeley — **Expected Graduation:** May 2024
Bachelor of Arts in Computer Science, Minor in Data Science — **GPA:** 3.72

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)*

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

PROJECTS

Full-Stack Todo List & Scheduling App – React, Node.js, MongoDB — Fall 2023
Personal Project, available at wesleyweisenberger.xyz.

- Seamless account creation & login, session management handled by JSON Web Tokens, and a secure REST API backend that persists data in MongoDB, with data automatically being refreshed across signed-in devices.
- Intuitive, accessible, & dynamic frontend built from scratch allows users to add tasks with customizable due date and priority options, and later remove, sort, & edit these tasks with attention paid to responsive layouts on mobile devices.
- Self hosted on DigitalOcean as a custom configured production server using Nginx & Let's Encrypt.

Weather Station & Online Monitor/Visualizer – C, HTML, Javascript — Spring 2021
Personal Project

- Constructed a custom battery-powered Arduino weather monitoring circuit & system which pushed environmental data to a database on a locally hosted Linux web server, accessible to the internet.
- Website allowed users to monitor and visualize weather data & trends. Users also had the ability to request more recent weather measurements from the device.

End to End Encrypted File Sharing System – Go — Spring 2023
Class Project

- Designed and developed an API that allows users to upload, append to, and 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 were taken on the server.

Gitlet – Java — Fall 2021
Class Project

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

WORK EXPERIENCE

Computer & Data Science Student Researcher — August 2022 – December 2023
Under Professor Johnathan Marshall

- Developed classifiers and statistical models to identify patterns and anomalies in historical crime data.
- Constructed XML parsers to parse cases and to ensure old, irregular data was interoperable with Pandas/NumPy.
- Employed Text Data Mining & Analytics to make conclusions about and to verify hypotheses about the data.