

Technical Skills

Languages: JavaScript, Java, C, HTML, CSS, SQL.

Technologies and Tools: Git, Node.js, Bash, Linux systems, React, Jupyter notebooks, Docker.

Relevant Experience

eFiling Specialist | ABC Legal Services — Seattle, WA

April 2023 – Present

- Configure JSON automation pipelines for document preparation to eliminate manual splitting and data validation work, increasing team productivity by 14%.
- Prepare, review, and electronically file legal documents in 9+ states according to county requirements, exceeding daily filing expectations by 30%.
- Investigate, document, and correct filing issues to improve internal company and external customer processes.

Summer Research Intern | Lewis & Clark College — Portland, OR (remote)

May – July 2021

- Researched secure computing system development through formal verification.
- Designed a high-level component architecture and encrypted communication protocol for a network-connected thermometer device.
- Developed multithreaded prime number generator on seL4 microkernel.

Software Engineering Intern | NCAR Earth Observing Laboratory — Boulder, CO (remote)

May – July 2020

- Developed a web interface using React and Highcharts to display diagnostic information so scientists can easily monitor their data acquisition systems, automatically analyzing the data to highlight potential concerns.
- Wrote unit tests to ensure correct behavior and prevent bugs.
- Automated building, testing, and deployment workflows with GitHub Actions and Ansible.

Peer Tutor | Lewis & Clark College — Portland, OR

September 2019 – May 2022

- Tutored students in computer science, math, and physics courses, including Linear Algebra and Algorithm Design and Analysis.

Web Development Intern | Field Day — Los Angeles, CA (remote)

May – August 2019

- Updated interfaces and modernized date picker component in customer-facing React marketing dashboard.

Projects

Virtual Fax Machine | github.com/linusbrogan/fax-machine

- Created a responsive web app to easily send faxes on Cloudflare's serverless platform, using the Telnix fax API.

Raytracer | github.com/linusbrogan/graphics

- Developed a 3D rendering program in C, which supports various objects with realistic lighting.

Onion Forecast | github.com/linusbrogan/bonion

- Built a website using Node.js and Docker to give a daily onion "weather forecast" for meals in Lewis & Clark's dining hall by analyzing meal data from its API.
- Won second place in a Lewis & Clark College hackathon.

Education

Lewis & Clark College — Portland, OR

September 2018 - May 2022

- **Bachelor of Arts**, Computer Science and Mathematics, minor in Physics.
- **Honors:** *summa cum laude* (GPA: 3.99), Sigma Pi Sigma (national physics honor society).
- **Association for Computing Machinery (ACM) Student Chapter:** Organized events, including talks and hackathons, to increase engagement and build community within the Computer Science department.
- **National Cyber League:** Ranked in the top 10% nationally across a range of cybersecurity skills, including forensics, network traffic analysis, password cracking, and web application exploitation.
- **Pacific Rim Collegiate Cyber Defense Competition:** Configured Linux servers for security and reliability, and led Lewis & Clark's 2021 team, mentoring team members in defensive system administration skills.