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# Linus Brogan

github.com/linusbrogan
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## Technical Skills

**Languages:** JavaScript, Java, C, HTML, CSS, SQL.
**Technologies and Tools:** Git, Node.js, Bash, Linux systems, React, Jupyter notebooks, Docker.

## Relevant Experience

**Peer Tutor | Lewis & Clark College** — *Portland, OR*          **September 2019 – May 2022**
- Tutored students in computer science, math, and physics.
- Broke down complex problems into achievable and familiar steps.
- Reviewed course material, clarified concepts, and guided test preparation.

**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 proof-of-concept networked thermometer device.
- Prototyped 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.
- Incorporated user feedback to improve data presentation and user experience.

**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.

## Activities and Projects

**Virtual Fax Machine | github.com/linusbrogan/fax-machine**          **February 2023**
- Created a responsive web app to easily send faxes on Cloudflare's serverless platform, using the Telnyx fax API.

**Raytracer | github.com/linusbrogan/graphics**          **May 2022**
- Developed a 3D rendering program in C, which supports various objects with realistic lighting.

**Club Leader | Association for Computing Machinery (ACM) Student Chapter**          **May 2019 – May 2022**
- Organized events, including talks and hackathons, for Lewis & Clark's ACM Student Chapter, increasing engagement with the Computer Science department.

**Pacific Rim Collegiate Cyber Defense Competition**          **April 2020, March 2021**
- Configured Linux servers for security and reliability.
- Led Lewis & Clark's 2021 team, mentoring team members in defensive system administration skills.

**National Cyber League**          **October 2020**
- Ranked in the top 10% nationally across a range of cybersecurity skills.

**Tetris | github.com/linusbrogan/tetris**          **December 2019**
- Implemented the classic game Tetris in Java with a team of several students.

**Onion Forecast | github.com/linusbrogan/bonion**          **December 2018**
- 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 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).
- Scholarships: Neely Merit Scholarship, Templeton National Merit Scholarship.