

JAMES SMYTHE

COMPUTER SCIENCE STUDENT
WITH A FOCUS IN COMPUTER ENGINEERING

Computer Science & Computer Engineering student with strong passion for problem-solving and experience with systems programming, computer architecture, software development, and Linux. Interested in software, systems, and low-level development.

[Not available on the web] 

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PROJECTS & EXPERIENCE:

CORPORATE INTERN AT PAPÉ

SUMMER 2025, 2026

CORPORATE IT INTERN

- Scripted and automated elements of the computer provisioning process, targeting choke-points to increase productivity
- Processed computer orders: imaging, setting up, and provisioning end-user hardware
- Coordinated with co-workers to document, synchronize, and resume a stalled project

GHOST

A TOY COMPUTING STACK

- Developed a Complex Instruction Set CPU architecture from scratch and built simulators in both Logisim and C++
- Developed an assembler and am working on a C compiler targeting the platform
- Wrote custom assembly code for memory management, in-memory filesystems, shell interactions, and text editing
- Designed to introduce learners to low-level computer structures

MASTO3DS

MASTODON ON THE 3DS

- Built a proof-of-concept Mastodon post viewer for the 3DS
- Queried the public REST API and parsed responses to display formatted social media posts
- Optimized software for limited, specialized hardware

HOMELAB

MULTI-SERVER INFRASTRUCTURE

- Maintain a homelab running many containerized services and applications using technologies like Docker, Apache, and Nginx
- Configure reverse proxies, TLS/SSL, and VPN networking for easy access to internal and external services

EDUCATION:

COLORADO SCHOOL OF MINES

2024 - CURRENT

Golden, CO

BS in CS with a focus in Computer Engineering
Cyber Defense Education Certificate.
Expected to graduate with a BS in Fall 2027

STANFORD UNIVERSITY

SUMMER 2023

Stanford, CA

Stanford's Summer Session

LANE COMMUNITY COLLEGE

2022 - 2024

Eugene, OR

High school dual enrollment

LANGUAGES:

- Python
- C/C++
- Java
- Javascript, HTML/CSS
- PHP
- SQL
- Verilog

SYSTEMS & TOOLS:

- Linux
- AWS Lightsail
- Docker
- Tailscale
- MeshCommander
- Apache
- Nginx
- VSCode
- Git
- LaTeX
- Markdown