JOSHUA A. FOUCH

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Overview

Fourth-year Computer Science student building full-stack web applications, REST APIs, and relational databases. Experienced in Linux server administration and collaborating with stakeholders to deliver scalable, reliable software.

Experience

Student Researcher Aug 2026 — Present
Air Force Research Lab (AFRL) *Steubenville, OH*

- Utilizing analytical problem-solving to extend AI characterization software, translating complex software-defined radio captures into actionable RF data.
- Collaborating closely within an Agile research team to continuously debug, test, and implement source code improvements.

Automation Programming Intern May 2026 — Present
Alaska Railroad Corporation *Anchorage, AK*

- Designed and implemented a RESTful web service using Django and PostgreSQL to monitor 115+ remote radios, delivering telemetry APIs for network monitoring dashboards.
- Applied database normalization and optimization principles to ingest and process unstructured operational data, rendering daily train-route visualizations.
- Administered and maintained Debian server infrastructure utilizing terminal utilities, SSH, and cron, ensuring high availability and secure data retention.

IT Helpdesk Technician Aug 2025 — May 2026
Dynamic Campus *Steubenville, OH*

- Tier-1 campus support on Windows and macOS via TopDesk.

Computer Science Teacher Assistant/Grader Jan 2025 — May 2025
Franciscan University *Steubenville, OH*

- Mentored students in Data Structures (C++), graded coursework, and held weekly office hours.

Projects

Scriptos, Senior Capstone - Assistant Lead Aug 2026 — Present

- Co-leading full-stack development of a Ruby on Rails application for the USCCB manuscript-approval workflow, deployed on Azure infrastructure.
- Driving customer/quality focus by leading requirements-gathering sessions with external stakeholders to iteratively design and deliver tailored software solutions.

Computing Curriculum Research & Publication, Data Analysis & Research Oct 2025 — Present

- Co-authored an IEEE Frontiers in Education 2026 paper on student performance and learning outcomes; analysis and visualization in R. Presenting in Paphos, Cyprus in October 2026.

Education

Franciscan University of Steubenville Steubenville, OH
Bachelor's of Science, Computer Science | Minor in Cybersecurity *Expected Graduation: May 2027*

- Cumulative GPA: 3.86/4.0 | Dean's List
- Coursework: Database Systems, Backend Web Development, Software Architecture, AWS Development, Algorithms, Data Structures, Cryptography, Cybersecurity

Certifications

AWS Certified Cloud Practitioner, Amazon Web Services (AWS) Nov 2025

Skills

- **Languages**: JavaScript, TypeScript, SQL, Python, Ruby, Go, C++, R, Bash, HTML/CSS
- **Web & Database Technology**: RESTful Web Services, PostgreSQL, Relational Database Management Systems (RDBMS), Database Normalization, Django, Ruby on Rails
- **Systems & Infrastructure**: GNU/Linux Administration, AWS (Certified Cloud Practitioner), Azure, Docker, Git, Server Troubleshooting
- **AI Application Development**: Cursor, Claude Code, OpenCode, OpenRouter