Sterling Loughmiller
sterlingloughmiller@pm.me | (208) 201-9901|
www.linkedin.com/in/sterling-loughmiller
https://github.com/sloughmiller

SUMMARY

Software engineer with 10+ years of systems engineering experience and a B.S. in Computer Science. Strong focus on backend and database engineering, with expertise in PostgreSQL, FastAPI, SQLAlchemy, and AWS. Skilled in designing schemas, optimizing queries, and building RESTful APIs integrated into scalable full-stack systems. Known for the ability to rapidly learn and apply new technologies, adapting from CNC automation to modern cloud-native applications.

SKILLS

Programming: SQL, Java (proficient); Python, C, C#, C++, JavaScript/TypeScript (working knowledge)
Database & Tools: PostgreSQL, MySQL Workbench, schema design, query tuning
Version Control: Git, GitHub
Cloud & Environments: AWS (EC2, RDS), Linux/Unix, Windows, macOS
Other Tools: SolidWorks, Mastercam, Siemens/Fanuc CNC systems

PROJECTS

Home Inventory App – Full-stack inventory management system for households and shared users
Tech: FastAPI, PostgreSQL, React (Vite + TS), Tailwind CSS, Netlify, Render, AWS (EC2, RDS)
Designed and deployed a secure, scalable inventory API using FastAPI and PostgreSQL with UUID-based routing, JWT authentication, and multi-inventory user access control.
Built a React PWA frontend with mobile-first Tailwind styling, modular components (cards, modals), and dynamic item/category/location management.
Implemented row-level security and scoped filtering for shared inventories via SQLAlchemy, with schema migrations managed using Alembic.
Deployed full-stack app using Render (backend), Netlify (frontend), and AWS RDS (PostgreSQL) with CI/CD and secure token handling.
Features include barcode scanning, role-based inventory access, and centralized logging with future support for QR labels and mobile optimization.
🔗Sterling Loughmiller GitHub

EDUCATION
Boise State University — Boise, ID
BS in Computer Science — **GPA:** 3.4
Relevant Coursework: Databases, Algorithms, Data Structures, Mobile App
Development, Theory of Computation, Programming Languages, Computer Security,
Ethical Hacking, Network Security & Defense

EXPERIENCE

Gayle Manufacturing Company – Caldwell, ID
Machine Shop Supervisor, Head Programmer, Lean Manufacturing Officer
July 2023 – Present
- Developed custom automation scripts for CNC and workflow operations, improving
reliability, throughput, and maintainability across multiple production lines.
- Designed scalable programming logic that reduced code redundancy by 90% and
enabled reuse across multiple parts and machines.
- Built technical documentation and training tools used by machinists, supervisors, and
engineers across departments.
- Spearheaded upgrades and integrations of new machinery and control software,
including macro installation, parameter tuning, and reverse engineering of
undocumented features.
- Supported multi-site technical coordination between domestic and international
engineering teams.

Assistant Machine Shop Supervisor
March 2019 – July 2023
- Engineered custom logic-based programming routines to enhance part quality and
increase throughput across CNC platforms.
- Reduced steel plate processing time by 25%, enabling a 75% increase in total
throughput.
- Supported all shop-floor operations: machine setup, tool calibration, G-code
debugging, and ongoing process improvement