

Kailash Nelson

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Software engineer with production distributed-systems experience, applied ML/CS/EE foundation, and 6+ years of entrepreneurship.

EDUCATION

Colorado School of Mines | Golden, CO

May 2026

B.S. in Computer Science | Minor in Electrical Engineering

- Global Engineering: Study abroad at Budapest University of Technology (Fall 2025) and SKEMA Business School (Fall 2022)
- Coursework (Software): Operating Systems, AI, ML, Algorithms, Programming Languages, Computer Organization, DBMS
- Coursework (Hardware): Circuits, Digital Logic, VLSI Design, Embedded Engineering

TECHNICAL SKILLS

Languages: Ruby, Python, C++, C, Java, JavaScript/TypeScript/HTML/CSS, Swift, Kotlin, Verilog, RISC-V Assembly, MySQL, PostgreSQL

Hardware & Embedded: Quartus Prime, Arduino, Hardware Testing, System Architectures, Embedded Design

DevOps & Tools: Temporal, Kubernetes, Helm, Datadog, Sentry, Incident.io, Sidekiq, AWS, Docker, Linux, Git, Vault, REST APIs, PayPal, MongoDB

Frameworks & Libraries: Sinatra, ActiveRecord, React, Flutter, PyTorch, pandas, scikit-learn

PROFESSIONAL EXPERIENCE

Software Engineering Intern | Checkr | Denver, CO

June 2026 – Aug 2026

- Moved monthly customer invoicing off engineer-in-the-loop batch jobs onto Temporal as one durable workflow per invoice.
- Replaced production-console month-end close with a FinOps self-service operator UI backed by a REST API.
- Hardened the invoicing money path with fail-closed controls and production-scale dry runs before rollout.

Software Development Intern | Coulton Creek Capital LLC | Golden, CO

May 2024 – Aug 2024

- Built Python investment models on US Census data to surface market trends for asset allocation.
- Built PyTorch Transformer forecasts at 93% real-world accuracy; served via REST APIs in two-week sprints.
- Automated ingest, cleansing, and viz workflows, removing manual data entry from research sprints.

Owner & Lead Technician | Lizard Repairs LLC | Steamboat Springs & Golden, CO

Oct 2018 – Apr 2024

- Built and scaled a premier electronics repair brand serving 500+ clients with enterprise-grade SLAs.
- Shipped and maintained a React booking platform with PayPal billing (LizardRepairs.com) to automate customer intake and status updates.

TECHNICAL PROJECTS

ClubHub | Python, Streamlit, SQLite

- Built a club-ops app with SQLite. Included RSVPs and check-ins, plus Streamlit admin and member portals.

Terminal Tetris | C, ncurses, Make

- Shipped a cross-platform terminal Tetris clone with seven-bag randomization, ghost piece, lock delay, HUD animations, and Make-wired automated tests.

"Akari" AI Constraint Solver | C++, Algorithms

- Automated bulb placement for Akari puzzles using backtracking with aggressive pruning; validated inputs and surfaced conflicting constraints.

LEADERSHIP & INVOLVEMENT

Network Infrastructure Manager | Kappa Sigma Fraternity | Golden, CO

Jan 2023 – Feb 2025

- Managed enterprise-grade network hardware, ISP relationships, and verification testing for 40+ residents; reduced downtime via proactive monitoring and documented swap procedures.

Treasurer | Mines Botanical Society | Golden, CO

Dec 2025 – Present

- Steward club finances and sponsorships for programs linking engineering practice with ecological understanding.