

Senior Software Engineer | Scalable Infrastructure & Automation Architect | AWS Certified

Professional Summary

I focus on delivering value wherever & however needed, in a timely manner. Some ways I've done that:

- Own the delivery of software products, from architecture to implementation to operation.
- Proactively address issues by making systems easier to observe & diagnose.
- Increase development velocity by automating & optimizing software build pipelines.
- Mitigate risk by following best practices and monitoring threat vectors.

Core Skills

LANGUAGES: TYPESCRIPT, PYTHON, GO, LUA, RUST, PHP

DATA: POSTGRESQL, ELASTICSEARCH, DYNAMODB, KAFKA, REDIS

WEB: REACT, SQL, JWT, REST, NGINX, TLS/SSL

INFRASTRUCTURE: AWS, DOCKER, KUBERNETES, LINUX (DEBIAN, RHEL), TERRAFORM

AUTOMATION: BASH, GITLAB-CI, SALT, PUPPET, PXE, DHCP, KICKSTART, RUNDECK

PRACTICES: AGENTIC CODING, GIT, CI/CD, SDLC, TDD, OBSERVABILITY, AGILE, IAC

Education & Certifications

- 1999: Bachelors in Computer Science from Arizona State University
- 2025: AWS Certified Solutions Architect – Associate

Selected Projects

LogBus | logbus.tfks.net

A Swiss Army knife for log processing. Built plugin framework allowing event aggregation, stream fan in & out, and simple but powerful pipeline customization. Original version in Typescript but ported to Rust for performance & strong safety guarantees.

FJX | fjx.tfks.net

An agent-accelerated forge where humans and LLM agents collaborate on projects using the same workflows & artifacts before agentic software development.

FotoLog | fotolog.tfks.net

A mobile-first SPA for curating & sharing trip activity & photos. Researching AI-assisted media organization workflows using semantic tagging, metadata enrichment, and vector-search concepts. Exploring hybrid retrieval patterns combining structured metadata, geospatial filters, and semantic similarity search.

Professional Experience

Software Engineer | Synexus | 2/2026 – Present

Built system to crawl domains per client SLA and classify content for brand safety

- Migrated from EC2 to serverless to reduce operational costs while meeting SLO's: DynamoDB, Lambda, S3
- Tiered site crawling to reduce cost & latency: Scrapfly, Playwright, 3rd-party API's
- Increased dev velocity and reduced errors with automated builds & deployments: Terraform, Gitlab-CI

Explorer | The World | 1/2021 – 1/2026

I took some time off to focus on family & personal development.

- Met requirements of life: to feel, to be alive
- Improved personal KPI's 100% quarter over quarter

Principal Engineer | BookAwardPro | 12/2020 – 10/2021

Scaled a bootstrapped MVP into a full SaaS product supporting thousands of users

- Built back-end API, task runner, and React SPA; automated product updates with versioned artifacts.
- Integrated DataDog to ensure proactive monitoring and reduce MTTR from days to hours.
- Enabled elastic scaling on AWS while maintaining minimal operating costs.

Systems Engineer | Terascope | 06/2017 – 06/2020

Operated thousand-node Elasticsearch super-clusters processing data at petabyte scale

- Automated server provisioning & cluster scale events: Salt, Node.js
- Partnered with product team to ensure SLA compliance and low-latency analytics.

Systems Engineer | IPVanish | 08/2014 – 05/2017

- Reduced server deployment time from days to under 2 hours: iPXE, KickStart, Python
- Improved abuse detection, diagnostics, capacity planning: ELK stack
- Increased bus factor with modern SW delivery stack: Git, GitLab

Cloud & DevOps Consultant | Independent | 2010 – 2014

Advised on and delivered solutions that improved company bottom line

- Help teams "lift & shift" from on-premises to AWS.
- Built reproducible workflows: Jenkins, RunDeck, Python, and BASH.
- Improved operational posture with greater observability: ELK, DataDog, Zabbix

Software Engineer | Early Career | 2000 – 2010

- Improved site performance at NewTimes via caching, load balancing, and replication.
- Built test automation framework at DataBill reducing pipeline errors by 40%.
- Engineer #1 at Edgeos, leading development through to acquisition.