Erik Stephens career@tfks.net | +1-213-537-5493 | career.tfks.net | Phoenix, AZ

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

An event processing engine for composing streaming pipelines from pluggable sources, transforms, and sinks. Supports fan-in/fan-out topologies, aggregation, bounded buffering, and backpressure. Focused on predictable behavior at capacity: stable throughput, bounded memory use, measurable latency & saturation.

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.

DropBear | dropbear.tfks.net

A single-writer, multiple-reader DropBox clone with a transparent storage layout. A native Android app supports read-only materialized views. A system daemon for Mac & Linux keeps local directories in sync. Removable drives do not cause delete storms.

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 DigitalOcean 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.