Dave Koons
Atlanta, GA • david.koons@davekoons.com
Staff Software Engineer | Distributed Systems | Backend Architecture
Remote-first engineer (12+ years remote)

SUMMARY

Staff-level Software Engineer with 15+ years designing, building, and scaling distributed backend systems and microservices in telecom, enterprise, and cloud environments. Expert in building highly available backend platforms, optimizing system performance, and modernizing legacy architectures. Demonstrated success driving cross-team alignment, leading design reviews, mentoring engineers, and owning large, mission-critical systems end-to-end.

Hands-on expertise in Java, C#, Python, Spring Boot, distributed data workflows, secure API design, HA failover logic, Kubernetes, databases, and CI/CD automation. Strong architectural intuition paired with deep debugging and performance profiling skills. U.S. Army veteran with proven technical leadership under pressure.

CORE SKILLS

Languages: Java, C#, Python, TypeScript, SQL, Bash
Backend: Distributed Systems, Microservices, REST APIs, Event-Driven Systems, HA/Failover
Cloud & Platforms: Kubernetes, Docker, Linux, AWS, Jenkins, Helm, Maven
Databases: PostgreSQL, SQL Server, MariaDB/MySQL, Query Optimization
Security: TLS, Certificate Automation, Vulnerability Remediation
Professional: Technical Leadership, Mentoring, Cross-Team Collaboration, System Ownership
Tools: Git, Jenkins, Elastic stack, K8s Operators (basic), Terraform (basic)

PROFESSIONAL EXPERIENCE

SpiderCloud (Corning → Airspan) — *Senior Software Engineer / Technical Lead*

2017 – Present | Remote

Lead engineer and system owner for SpiderCloud’s EMS/NMS platform modernization. Designed and implemented distributed microservices and high-availability systems supporting large-scale telecom deployments.

Impact & Achievements:

- **Owned architecture and development** of a complete microservices rewrite of the Spidernet EMS (Spring Boot, Kubernetes), increasing reliability, deployment speed, and internal developer productivity.

- **Designed and implemented High-Availability failover logic**, including leader election, heartbeats, cluster coordination, and DB replication behaviors.
- **Developed and maintained backend services** powering secure REST APIs, distributed job execution, remote node orchestration, and large-scale system telemetry.
- Implemented **secure service-to-service communication**, automated TLS certificate rotation, and full remediation of dependency-based vulnerabilities (Java/Node/Docker).
- **Optimized system performance**, reducing load latency for tens of thousands of nodes by improving API throughput, query strategies, and in-memory caching.
- Created CI/CD pipelines (Jenkins/Maven/Docker) that replaced manual builds, improving deployment consistency and cutting build times significantly.
- **Led design reviews, mentored junior and mid-level engineers**, defined coding standards, and helped level up team-wide software quality.
- Acted as primary technical escalation point across backend, databases, distributed logs, Kubernetes, and API gateways.

Seneca — *Lead Software Developer & Architect*

2009 – 2017 | Remote

Designed and built a full-stack operations/ticketing system used across field telecom operations.

- Architected backend services (C#/SQL Server), implementing complex business logic, workflow automation, and role-based access.
- Developed a real-time operations UI, map-based interfaces, and advanced reporting consumed by engineering and management teams.
- Integrated **Slack automation**, removing multiple manual workflows.
- Created and maintained a cross-platform **Flutter mobile app** enabling field techs to update and track work from remote sites.
- Owned all DevOps processes, environments, releases, and server deployments.

Lotek Specialists — *Founder & Lead Engineer*

2006 – 2008 | Atlanta, GA

- Built a C#.NET automation tool that reduced E911 provisioning time from hours to minutes.
- Automated telecom hardware configuration using SSH/SNMP workflows.
- Managed multi-state field engineering operations and client integrations.

AT&T Wireless & Ericsson — *Technical Roles (Condensed)*

1996 – 2006 | Atlanta, GA

- Designed and deployed E911 accuracy systems across the Southeast region.
- Built Perl/Cisco automation tools for provisioning routers and switches.
- Led field teams deploying cellular base stations across multiple markets.
- Created automation tools that reduced configuration errors and accelerated deployments.

EDUCATION & CERTIFICATIONS

USC Developer Courses — Database Scalability, Unit Testing, Lambda Architecture
Ericsson Cell Site Implementation • Advanced Data Translations
U.S. Army — Electronic Warfare Systems Repair (AIT)

PATENT

Remote Emergency Wireless E-911 Call Testing — US20080254790 A1