

David Spell

Senior Site Reliability Engineer (SRE)

Distributed Systems • Automation, Observability, and Compliance-Aware Operations (HIPAA, PCI, GRC)

Remote, South Carolina (Open to Relocation)

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Professional Summary

Senior site reliability engineer with 20+ years in distributed systems, support, and product engineering, including 10 years at IBM. I resolve high-severity production incidents through deep troubleshooting, code-level analysis, and automation that improves MTTR, reliability, and operational visibility. I also bring compliance-aware security operations with training in HIPAA, PCI, and GRC, applying governance controls and audit-ready documentation in real-world environments.

Key Achievements

Days -> Minutes

PostgreSQL and Grafana observability suite that reduced global incident response timelines from days to minutes, recognized with 440 RSUs.

140-Host Zero-Failure Upgrade

Orchestrated a parallelized upgrade of 140 distributed hosts in under 8 hours with zero failures using Linux automation.

Critical Defect Recovery

Identified a critical architectural defect and authored a recovery protocol that prevented broad enterprise impact across a global customer base.

Support <-> Engineering Bridge

Embedded directly into the product engineering team to eliminate multi-team handoff delays, reducing MTTR and improving first-call resolution by bringing live incident context into the development cycle.

Professional Experience

Security Systems Analyst

4 Consulting, Inc. | Apr 2026 - Present

- **Platform and Endpoint Hardening:** Administered and secured Rocky Linux systems as part of day-to-day security operations.
- **Intrusion Detection and Vulnerability Tooling:** Used Snort IDS, Nessus, and OpenVAS to identify threats, prioritize remediation, and improve security posture.
- **Security Automation:** Built and maintained Ansible and Python automation to standardize security checks, reduce manual variance, and improve evidence traceability.
- **Compliance and Governance:** Applied compliance-aware operational controls informed by HIPAA, PCI, and GRC training while aligning controls and reporting with ISO 27001, NIST, SOX, and SOC 2 requirements.
- **Network Security Operations:** Supported secure network design and troubleshooting across VLAN, VPN, and routing configurations.

Senior Support, Automation, and Systems Consultant

Freelance and Contract | Oct 2026 - Apr 2026

- **Ongoing Retainer Support for Local SMBs:** Served as a trusted technical partner for small businesses on monthly and quarterly retainers, providing continuous support across systems, workflows, and operational tooling.
- **Cross-Functional Problem Solving:** Handled issues spanning infrastructure, integrations, internal tools, authentication, data handling, and day-to-day operational blockers that required senior-level judgment.
- **Lightweight Automation and Process Improvement:** Built small utilities, scripts, and workflow enhancements to reduce repetitive tasks for owners and staff, improving reliability and reducing manual effort.

- **Stability, Uptime, and Risk Reduction:** Identified recurring failure points and implemented practical fixes across hosts, services, and business-critical processes.
- **Documentation and Knowledge Transfer:** Created and maintained clear runbooks, checklists, and onboarding materials so teams could operate more independently.
- **General Technical Advisory:** Helped clients evaluate tools, vendors, integrations, and modernization paths with a focus on cost, simplicity, and long-term maintainability.

Software Developer and AI Automation Engineer

IBM | May 2023 - Sep 2025

- **Support-to-Engineering Transition:** Embedded into the product engineering team to shorten MTTR, bringing live incident context directly into the development cycle and improving first call resolution by eliminating the hand-off gap between support and engineering.
- **AI Root Cause Analysis Interface:** Developed React, Redux, and TypeScript interfaces for an AI-enabled root cause analysis engine used to accelerate complex failure resolution and reduce mean time to diagnosis.

Senior Support Engineer and Global Weekend Escalation Lead

IBM | Mar 2021 - May 2023

- **Observability Suite Engineering:** Engineered a PostgreSQL and Grafana observability suite that reduced global response timelines from days to minutes; recognized with 440 RSUs.
- **Critical Defect Recovery Protocol:** Identified a critical architectural defect and created a recovery protocol that prevented broad enterprise impact.

Technical Support Engineer (SME)

IBM | Aug 2018 - Mar 2021

- **140-Host Parallelized Upgrade:** Orchestrated a parallelized upgrade of 140 distributed hosts in under 8 hours with zero failures using Linux automation.

Desktop Support Administrator

Piedmont Technical College | Apr 2011 - Jun 2015

- **2,000-Device Endpoint Deployment:** Architected endpoint deployment workflows for 2,000 devices, reducing imaging timelines from two weeks to overnight.

Technical Projects

Support Analytics Platform

Python and PostgreSQL analytics platform surfacing incident bottlenecks across historical support data, enabling data-driven triage prioritization and reducing repeat-escalation rates.

AI-Driven Case Analysis Tooling

Internal Python workflow tooling that accelerates root-cause analysis by validating new cases against resolved-incident patterns.

Publications & Thought Leadership

[The Wedding Cupcake - Sub-Cognitive Declarative Kubernetes](#)

Article

When to stop chasing recursive perfection and start delivering, with PM, GRC, and DevSecOps

[Improving Resume Parsing with Markdown](#)

Article

Technical write-up on structured Markdown workflows for reliable ATS and copy/paste parsing.

[Kuber Netty Learns Kubernetes \(KNLK\)](#)

Work In Progress

A narrative-driven Kubernetes learning ecosystem documenting the build of a CKA-aligned training course, including pedagogy, lab design, and the batting-cage warmup model for repeatable operator practice.

Education & Certifications

Education

A.A.S., Computer Technology (Networking) Piedmont Technical College

B.A., Music (Education) Newberry College

Certifications

CompTIA A+

CompTIA Network+

Apple Certified Support Professional

Kubernetes Certification Study Track

HIPAA Security and Privacy Training

PCI Compliance Training

Governance, Risk, and Compliance (GRC) Training

Professional Recognition

“David has a rare ability to combine deep problem determination skills with clear, empathetic communication. I recommend him without reservation for his technical excellence.”

“He consistently demonstrated exceptional technical depth, sound judgment in high severity situations, and an unwavering commitment to customer success.”