NICHOLAS HALL

Staff Platform Engineer | Site Reliability | Cloud Infrastructure

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SUMMARY

Staff-level platform and site reliability engineer with 21 years of experience solving difficult production infrastructure problems across AWS, GCP, Azure, Kubernetes, and hybrid environments. Builds and modernizes platforms that reduce cloud cost, deployment friction, and operational risk, with results including $4M/year in GCP savings, 60-to-6-minute CI/CD, and observability at 20B+ events/week. Hands-on technical lead from architecture through production ownership and cross-team adoption.

SELECTED IMPACT

- Reduced GCP spend by $4M/year at Paramount+ by cutting BigQuery dependence and deduplicating logs at source without losing observability.
- Cut CI/CD build and deploy cycles from 60 minutes to 6 minutes at Formant by building the Helm foundation and driving GitOps adoption.
- Operated Elasticsearch on Kubernetes processing 20 billion log entries per week for a large-scale streaming platform.
- Cut new-tenant provisioning from 1 week to 30 minutes at FORT Robotics; improved deployment/recovery time 83% and RTO 87%.

EXPERIENCE

Growth Protocol - Senior Platform / DevOps Engineer **May 2025 - Apr 2026**

Platform owner for a startup ML/SaaS environment spanning GCP, AWS, and Azure, responsible for cloud architecture, delivery systems, reliability, and compliance.

- Delivered a multi-cloud Kubernetes platform across GKE, AKS, and EKS, consolidating 30+ Cloud Run services and establishing SLOs, SLIs, and error budgets from zero.
- Built and secured GCP infrastructure across GKE, Compute Engine/VPC, Cloud Load Balancing, Cloud Armor, firewall rules, Secret Manager, Pub/Sub, and Artifact Registry.
- Owned SOC 2 Type I technical implementation end-to-end and ran incident/change management through Jira Service Management.
- Reduced ML training time from days to hours and compute cost from hundreds to tens of dollars per run; provided technical leadership for 6+ engineers.

Formant - Senior DevOps Engineer **Mar 2024 - Apr 2025**

Platform engineer for an industrial robotics SaaS company, owning the internal developer platform, Kubernetes modernization, CI/CD, and production reliability.

Position eliminated in a ~30% company reduction in force.

- Designed and shipped Formant In a Box, a Kubernetes packaging and deployment platform, owning architecture and hands-on delivery.
- Owned GitHub Actions CI/CD and self-hosted runners, built the Helm foundation, and led the move to GitOps, cutting build/deploy cycles from 60 minutes to 6 minutes.
- Built a paved-road Kubernetes platform with Helm and GitOps, giving application teams standardized deployment, observability, secrets, configuration, and production-like environments across cloud and customer-owned infrastructure.
- Built robot-fleet telemetry pipelines moving ~390 GB/day from ~500 industrial robots into predictive-maintenance and model-training systems; led 3-5 engineers through platform migration work.

FORT Robotics - Site Reliability Engineer **Aug 2022 - Mar 2024**

SRE for a greenfield robotics-safety SaaS platform, responsible for production reliability, incident response, observability, and Kubernetes infrastructure.

- Established the SRE and incident-command model from zero for a greenfield robotics-safety SaaS platform, including SLOs/SLIs, severity and escalation paths, on-call workflows, disaster recovery, runbooks, and post-incident practices.
- Migrated services to Kubernetes, reducing deployment and recovery time 83% and improving RTO 87%; created 25 Helm charts that cut new-tenant setup from 1 week to 30 minutes.
- Built the observability and metrics platform used for operational health, capacity planning, cost visibility, and production debugging.

EXPERIENCE - CONTINUED

Paramount+ / Paramount Global - Site Reliability Engineer (Contract) **Jan 2022 - Aug 2022**
Contract SRE on the Paramount+ streaming observability platform, operating high-volume logging infrastructure and reducing telemetry cost at scale.

- Operated Elasticsearch on Kubernetes (ECK) processing 20 billion log entries per week.
- Cut $4M/year in GCP spend by reducing BigQuery dependence and deduplicating log messages at source with no loss of observability.
- Moved logging deployments to GitOps with ArgoCD and built a reusable regex library that structured billions of previously unstructured log entries.

Graylog - Senior Site Reliability Engineer **Jan 2020 - Dec 2021**
Infrastructure/SRE engineer for Graylog Cloud, owning AWS platform architecture, reliability, and launch readiness from initial build through general availability.

- Helped build and launch Graylog Cloud, owning platform foundations through SOC 2 Type II, beta, and general availability; the product later reached $20M ARR.
- Owned AWS infrastructure and architecture end-to-end across compute, networking, security, and cost from initial build through GA.
- Built a Go load-testing platform generating 200,000 logging requests per second; defined SLOs, SLIs, and error budgets and led 3-5 engineers through launch.

KSDK-TV - IT Manager **May 2016 - Apr 2019**
IT manager for a broadcast television environment, leading infrastructure operations, automation, and a small technical team.

- Led a 2-5 person IT team building Python and PowerShell automation that reduced rework by 97% and saved 160 hours annually.

Earlier Roles: Maryville University, Enterprise Holdings, Computer Techniques | 2011 - 2016
U.S. Army - Military Intelligence Systems Maintainer | 2005 - 2011

ENGINEERING PROJECT

OpenLaneLink - Creator / Lead Engineer **2025 - 2026**

- Built an open replacement for commercial bowling scoring and machine-control systems spanning ESP32 firmware and edge nodes, gateway services, Redis event streaming, backend services, and a React/TypeScript frontend.
- Designed a fault-tolerant distributed edge architecture with hot-swappable ESP32 lane nodes, per-lane state machines, bounded failure domains, and independent wireless/wired transport paths for degraded-mode operation.

SKILLS

Platform / Infrastructure: Kubernetes, Docker, Helm, Terraform, Ansible, ArgoCD, GitOps, GitHub Actions, CI/CD, Linux, on-prem, edge, distributed systems
Cloud: AWS (since 2014), GCP, Azure, GKE, AKS, EKS, Compute Engine, VPC, Cloud Load Balancing, Cloud Armor, Cloud Run, BigQuery, Secret Manager, Pub/Sub, Artifact Registry
Observability / Reliability: SRE, Elasticsearch, ECK, OpenTelemetry, Prometheus, Grafana, logging, metrics, alerting, incident response, disaster recovery, RTO/RPO, on-call systems
Data / Messaging: Kafka, Redis, Postgres, MongoDB, Snowflake
Security / Compliance: SOC 2 Type I/II, PCI DSS, SOX, Vault, IAM
Software / Automation: Python, Go, Bash, PowerShell, TypeScript, React, Flask, Celery, APIs