

Christian Burke

Infrastructure & Platform Engineer · ML Infrastructure · Distributed Systems

Platform engineer with 9+ years building production-grade Kubernetes infrastructure, distributed data pipelines, and ML compute clusters. Proven record of identifying high-leverage architectural problems, aligning stakeholders across organizations, and delivering systems that scale.

EXPERIENCE

Lead Infrastructure Engineer

Baton · Ryder Technology Lab · San Francisco · 2023 – 2026

- ▶ Identified a long-standing architectural mismatch between product and data systems: legacy MySQL integrations maintained by product engineers were unreliable and burning hundreds of engineering hours annually. Proposed and led a cross-functional migration to a Flink-based pipeline, aligning Data Platform and Product teams on a shared strategy. Delivered a 20x improvement in API latency and eliminated the maintenance burden entirely.
- ▶ Recognized that ad-hoc EC2 deployments were a scaling ceiling: no observability, no repeatable deploys, SSH-based operations. Made the case to the founder for EKS over ECS on the grounds of flexibility and team growth, codified the entire environment in IaC, and executed migration of critical Flink jobs and core backends.
- ▶ Architected a centralized telemetry pipeline and observability platform, integrating 3rd-party APIs to automate monitoring for key data sources and internal KPIs. Realized \$150k in annualized savings through pipeline optimization.
- ▶ Reduced cloud infrastructure spend by \$160k/year by introducing auto-scaling node pools and right-sizing Data Platform workloads.
- ▶ Turned external security pressure into internal organizational credibility: after a parent org incident triggered a compliance audit, led a 3-person team through an end-to-end security overhaul covering data integrity, lateral movement, access controls, and public exposure. Navigated significant stakeholder friction across every pod in the org to remove root DB access, enforce SSO, and harden the entire data infrastructure posture.
- ▶ Mentored mid-level engineers in advanced networking and IaC; authored technical assessment guides and trained interviewers, resulting in 4 successful hires and a measurably stronger team.

Platform / Infrastructure Engineer (Early Hire)

Joy · San Francisco · 2017 – 2023

- ▶ Sole infrastructure engineer for 5+ years — owned production Kubernetes clusters from initial adoption through mature multi-environment operations at scale.
- ▶ Designed and scaled a distributed synchronization engine handling 20k+ daily customer registries to 10x original load through progressive architectural improvements.
- ▶ Modernized CI/CD from Jenkins to CircleCI, enabling 2–5 daily production releases across 10+ microservices with seamless database migrations integrated into the deploy pipeline.
- ▶ Reduced CI build times by 60% and container image sizes by 5x through multi-stage Docker builds and strategic layer caching.
- ▶ Built and maintained full-stack customer-facing features in React and Node.js, maintaining a tight feedback loop between application behavior and underlying infrastructure.
- ▶ Hardened system reliability through comprehensive health checks, fault-tolerant APIs, and observability via Datadog and New Relic.

Web Developer

BP Web Design · Rohnert Park · 2015 – 2017

- ▶ Led development of a custom e-commerce platform and managed infrastructure for 20+ web properties. Drove Apache → Nginx migration for performance and scalability.

PROJECTS

KubeRay GPU Cluster on AWS EKS — Self-healing, auto-scaling KubeRay cluster using spot instances. Trained a simple GPT-2 model starting from random weights. Integrated observability via Grafana. Implemented extensive caching at the AMI and Docker image layers to speed up boot time. Purpose-built to develop fluency in GPU orchestration and ML inference+training infrastructure.

EDUCATION

Sonoma State University B.S. Computer Science · B.S. Mathematics · Class of 2016

SKILLS & TECHNOLOGY

ML & Compute: KubeRay · GPU cluster orchestration · distributed training · model serving

Containers & Orchestration: Kubernetes (EKS) · Helm · Docker · RBAC · API tuning · Argo CD

Data & Messaging: Kafka · Flink · PostgreSQL · MySQL · MongoDB · RabbitMQ

IaC & CI/CD: Terraform · Pulumi · GitHub Actions · CircleCI · Jenkins

Observability: OpenTelemetry · Grafana Cloud · Datadog · New Relic · SLO/SLA design

Languages: Go · Rust · TypeScript/Node.js · Python · Bash/POSIX