

JAMES OLDS

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SUMMARY

Full-stack Platform Engineer specializing in AI-powered developer tools and internal platforms. 10+ years building full-stack solutions that eliminate friction and multiply engineering velocity, from CLI utilities and IDE extensions to workflow automations and CI/CD pipelines. Deep expertise in Kubernetes, Terraform, and cloud infrastructure (GCP, AWS), with recent focus on AI adoption and integration across engineering teams.

EDUCATION

University of Maryland Global Campus

2018

BS Software Development and Security

PROFESSIONAL EXPERIENCE

Platform Engineer

Remote

Trail of Bits

September 2022 – October 2025

- Developed AI-assisted finding generation feature extending WeAudit VSCode extension with vector search (Qdrant) over historical audits and Langfuse for prompt management and feedback collection, iteratively improving vulnerability documentation workflows for security researchers
- Led AI adoption across engineering and non-technical teams through Claude Code knowledge-sharing sessions and integration of Claude into PR review pipelines, automated workflows, and documentation updates
- Built Dagster ETL pipelines to sync business data into BigQuery and DuckDB, enabling natural-language SQL agents, AI-assisted analytics, and automated Metabase dashboards that replaced manual spreadsheet workflows
- Built and maintained full-stack systems across Hugo, TailwindCSS, and Astro frontends, Python, Go, and TypeScript backend APIs, and Cloud Run and Kubernetes infrastructure, powering both public-facing sites and internal self-service tooling including workflow automations via Zapier and n8n
- Designed and deployed GCP and Kubernetes infrastructure entirely from scratch using Terraform, including initial project setup, GKE cluster creation, secure networking, GitHub Actions workload identity configuration, and ArgoCD for GitOps based continuous deployment
- Architected hybrid GitHub Actions runner platform using Cloud Run Functions and ephemeral GCE instances, achieving up to 90% cost savings compared to GitHub-hosted runners while improving build performance and scalability
- Built cloudexec open-source CLI enabling developers to run long-running jobs on DigitalOcean with automatic resource cleanup, eliminating manual VM management and reducing cloud waste
- Created dynamic troubleshooting runbooks on Cloudflare Workers that augmented static documentation with live service data (running pods, recent events, logs), reducing mean time to resolution for engineers unfamiliar with infrastructure
- Deployed and managed Coder for secure cloud-based development environments alongside internal self-hosted services, and operated Langfuse and SigNoz LLM observability platforms supporting the AIxCC team, which placed 2nd at DEF CON 2025

Infrastructure Engineer *Remote*
Oden Technologies *November 2021 – August 2022*

- Implemented Garden.io to streamline Kubernetes development cycle, significantly reducing merge conflicts and mean time to merge, while improving developer productivity through better local-to-production workflows
- Migrated Google Cloud Monitoring dashboards to Grafana with Jsonnet and Terraform, dramatically improving observability and monitoring developer experience through code-based, version-controlled dashboards
- Configured Bazel build system for Golang monorepo, optimizing CI/CD pipeline build performance and developer iteration speed
- Operated large-scale data analytics deployment on Kubernetes and GCP with Terraform, managing complex infrastructure across multiple services

Sr. DevOps Engineer *Remote*
Ad Hoc LLC *June 2018 – November 2021*

- Migrated AWS EC2 Linux hosts to Docker containers on ECS Fargate, greatly reducing operational complexity while increasing security and deployment velocity, eliminating infrastructure maintenance overhead for development teams
- Led migration of Jenkins pipelines to AWS CodeBuild and GitHub Actions, significantly reducing operations overhead and improving developer experience by eliminating self-hosted Jenkins troubleshooting
- Developed browser-based code evaluation environment with Golang on GCP using Identity Aware Proxy, enabling engineers 1-click access to candidate code and reducing major recruitment pipeline bottleneck
- Operated large-scale AWS deployment across multiple VPCs utilizing IAM, S3, Lambda, ECS/ECR, and EKS with focus on developer self-service and infrastructure automation

Sr. Network Administrator *Oklahoma City, OK*
Supreme Court of Oklahoma *June 2016 – June 2018*

- Designed infrastructure validation pipeline using Salt to orchestrate VM deployment to Linux KVM hosts, automating testing workflows and reducing manual validation overhead for network changes
- Built web application monitoring service in Python using Serverless Framework on AWS Lambda, providing automated health checks and reducing response time to service disruptions
- Developed Python library for SilverPeak's SD-WAN API to automate configuration changes across large-scale fleet of edge devices, eliminating manual configuration and validation errors
- Utilized Azure DevOps Server for version control and release pipelines to automate and track network infrastructure changes, establishing GitOps practices for infrastructure teams

Early Career

CSC - Network Engineer: Automated network devices using Python and Perl.

United States Navy - IT Network Engineer: 5 years military service; mentorship coordinator