

DAVID ROHWEDER

Backend Software Engineer | AWS Cloud, Terraform, Distributed Systems, Platform Engineering

+1 (484) 987-5984 | david01rohwerder@gmail.com | linkedin.com/in/davidrohwerder | github.com/davidrohwerder

PROFESSIONAL SUMMARY

Backend software engineer focused on cloud-native AWS systems, distributed microservices, Terraform, and production reliability. Led migration of an on-prem distributed microservice application to a Terraform-managed AWS architecture, and founded Hardware Ranked, a production startup platform serving thousands of daily page views across autoscaling EKS services, serverless workflows, Aurora/PostgreSQL, DynamoDB, ElastiCache, SQS, Lambda, and S3. AWS Certified Developer – Associate and HashiCorp Certified: Terraform Associate.

CORE SKILLS

AWS Architecture: EKS, ECS, Lambda, EventBridge, SQS, S3, DynamoDB, Aurora/RDS, ElastiCache Serverless, ALB, ACM, Route 53, WAF, IAM, VPC, CloudWatch, Secrets Manager, SSM, ECR

Terraform / IaC: reusable modules, remote state, state locking, workspaces, environment promotion, IAM/VPC/service modules, drift review, protected applies

Infrastructure / DevOps: GitHub Actions OIDC, GitLab CI/CD, Docker, Kubernetes, Linux, CI/CD pipelines, release automation, observability, cost controls

Distributed Systems: microservices, high availability, event-driven architecture, autoscaling, caching, resiliency, API design, service decomposition, cloud migration, security hardening

Languages / Backend: Python, TypeScript, JavaScript, Swift, Java, C++, FastAPI, REST APIs, OpenAPI, PostgreSQL, Alembic, Redis, pytest, Playwright

EXPERIENCE

Iridium Satellite Communications

July 2023 – Present

Software Engineer II | Promoted from Software Engineer in March 2024

Phoenix, AZ

- Led migration of an on-prem distributed microservice application to AWS, translating legacy service topology into Terraform-managed networking, compute, data, queueing, and deployment resources.
- Authored Terraform modules and environment configurations with remote state separation, parameterized service stacks, least-privilege IAM, and repeatable plan/apply workflows.
- Designed backend cloud patterns for containerized and serverless workloads using EKS, Lambda, EventBridge, S3, DynamoDB, Aurora/RDS, ElastiCache, IAM, and private VPC networking.
- Reworked CI/CD and container publishing flows for Docker delivery to AWS ECR and enterprise artifact repositories, improving repeatability of cloud deployments and infrastructure releases.
- Built test-first backend automation services for satellite and telephony validation, combining Python, hardware control, regression infrastructure, and cloud-backed integrations.
- Rebuilt a critical configuration platform from interface specifications in two weeks, delivering a reusable client package with automatic S3 uploads from backend APIs.
- Migrated backend workflows from HTTP polling to Server-Sent Events (SSE) and refactored persistence from SQLite to PostgreSQL with Alembic migrations.

Hardware Ranked

2025 – Present

Founder / Lead Cloud Engineer | Distributed AWS microservices platform

Remote

- Founded and built a production cloud-native ranking and commerce platform serving thousands of daily page views across a React/Shopify Hydrogen frontend, FastAPI backend services, and admin tooling.
- Provisioned AWS infrastructure with Terraform across autoscaling EKS services, Lambda, EventBridge/SQS, S3, DynamoDB, Aurora/PostgreSQL, ElastiCache, ALB, WAF, ECR, Secrets Manager, SSM, ACM, and Route 53.
- Built reusable Terraform modules for application services, IAM roles, security groups, queues, databases, secrets, DNS, and deployment configuration to keep environments consistent and reviewable.
- Designed event-driven serverless workflows for user requests, notifications, social activity, comments, benchmark submissions, and product scoring with asynchronous processing and durable storage.
- Implemented autoscaling backend services on Kubernetes with containerized deployments, health checks, load balancing, cache integration, and production observability through AWS-native tooling.
- Created GitHub Actions OIDC workflows for keyless AWS authentication, private ECR publishing, Terraform plan/apply automation, service refreshes, budgets, WAF limits, and protected applies.

EDUCATION

Georgia Institute of Technology

Jan. 2025 – Present

Master of Science in Computer Science, In Progress | GPA: 4.0 | 8/10 courses completed

Atlanta, GA

Pennsylvania State University

Aug. 2019 – May 2023

Bachelor of Science in Computer Science | Mobile Applications Teaching Assistant

State College, PA

Certifications: AWS Certified Developer – Associate | HashiCorp Certified: Terraform Associate (003)