JOSH DEEDEN

Web, Backend & Infrastructure Engineer

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SUMMARY

Engineer who builds the platforms other engineers build on. Two decades shipping code taught me what makes infrastructure painful—and how to fix it. Now I focus on CI/CD, cloud architecture, and developer tooling. AWS, Kubernetes, and Terraform certified.

PROFESSIONAL EXPERIENCE

CLUBHOUSE

Senior Infrastructure Engineer | April 2025 – Present

- Led comprehensive infrastructure modernization with data-driven configuration patterns, consolidating 5,000+ lines of monolithic Terraform into maintainable, composable architecture supporting 110+ AWS resources across queues, storage, caching, databases, and CI/CD—enabling safer deployments and faster infrastructure evolution.

- Optimized GitHub Actions CI pipeline through industry-standard caching, parallelization, and dependency management best practices—reducing pipeline execution times by 50% and accelerating developer feedback loops.

- Established enterprise-grade service ownership system achieving 100% coverage across 770+ production services with type-safe validation and automated drift detection, eliminating operational blind spots and accelerating incident response.

- Drove multi-layered cost optimization initiatives including automated SMS fraud detection saving thousands daily, observability cost reduction through custom metric optimization and log ingestion tuning, comprehensive cost attribution tagging across 50+ resources, network isolation for data

partnerships, and infrastructure rightsizing—delivering measurable cost reductions while improving system reliability.

- Engineered k3d-based local development environment with one-command setup and live reload, with full AWS emulation via LocalStack—accelerating developer onboarding and enabling rapid local iteration.

Technologies: Python, Django, Celery, AWS (EC2, ASG, ECS, RDS Aurora, ElastiCache, IAM, S3, Lambda, NAT Gateway), Terraform, Packer, GitHub Actions, Docker, Kubernetes (k3d, Kustomize, Tilt), PostgreSQL, DynamoDB, Valkey, Prometheus, Grafana, Loki, LocalStack

CENTRIC SOFTWARE

Senior Cloud Engineer - Innovation Team | March 2024 – April 2025

- Architected and deployed enterprise-grade cloud infrastructure using Terraform and Terragrunt across AWS and Azure—eliminating manual configuration errors and reducing deployment times by ~60%.
- Engineered and maintained fully-automated production-grade Kubernetes clusters across AWS and Azure, leveraging Helm charts, ArgoCD and automated CI/CD pipelines to orchestrate a resilient microservices ecosystem. Spearheaded advanced cloud-native practices by implementing automated scaling, robust observability (Prometheus, Grafana, Loki, Tempo), and comprehensive security measures.
- Pioneered a multi-cloud approach that empowered the sales team to offer flexible client solutions, directly unblocking key enterprise deals and expanding market reach.
- Mentored development teams to optimize operational workflows and provided strategic guidance on industry best practices in DevOps.

Technologies: Terraform, Terragrunt, AWS, Azure, Kubernetes (AKS & EKS), Helm, Docker, Cilium, Prometheus, Grafana, Loki, Tempo

PRISMATIC

Senior Infrastructure Engineer | March 2023 – December 2023

- Architected and deployed customizable Docker containers for both CI jobs and production services, improving deployment efficiency by 50% and standardizing dev environments.
- Engineered a Dockerized Go application to streamline pipeline execution within a monorepo, reducing build times from 20+ minutes to <5 minutes and improving developer productivity.
- Transformed an outdated Python tool into a robust TypeScript application, automating documentation generation and enhancing team productivity.

Technologies: Linux, Docker, Go, GitLab CI/CD, TypeScript, Node.js, Python

ONTRA

Lead Infrastructure Engineer | September 2019 – November 2022

- Architected a serverless solution to replicate the production database into Snowflake, reducing operational costs and improving data availability for BI dashboards.
- Engineered a custom system to provision ephemeral test environments for every pull request, streamlining testing workflows and accelerating feedback loops.
- Delivered an AWS EKS-based platform for GitLab runner workloads, enhancing CI/CD capabilities while reducing operational expenses.
- Developed an Ansible playbook to automate local development setups for Mac laptops, reducing new hire onboarding time from 2 days to <2 hours.

Technologies: AWS (CDK, Lambda, Step Functions, ECS, Fargate, RDS, S3, EKS, IAM, EC2), Linux, Docker, Node.js, TypeScript, Python, Datadog, Kubernetes, GitLab CI/CD, Helm, Bash, Ansible, macOS, Traefik, Snowflake

WURL

Senior Infrastructure Engineer | April 2018 – August 2019

- Architected and deployed a scalable serverless solution for video file ingestion, enhancing the reliability and scalability of video streaming services.
- Engineered a high-performance Go-based tool for HTTP log processing, enabling rapid insights into viewer behavior and platform optimization.

Technologies: AWS (Lambda, S3, DynamoDB, ECS, Fargate, Transfer for SFTP), TypeScript, Node.js, Serverless Framework, Go, Docker

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ADDITIONAL ROLES

Senior Full Stack Engineer | January 1998 – January 2018

- Contributed to major software development projects for companies including PolicyGenius, Jibe, OkCupid Labs, VMware, and Microsoft.
- Worked across Ruby on Rails, Node.js, Java, and more, demonstrating flexibility and a strong ability to adapt to new technologies.

PROJECTS

SUBNETTER

Open Source Network Planning Tool | 2024 – Present

- Built a multi-cloud subnet allocation tool for AWS, Azure, and GCP that generates deterministic, non-overlapping CIDR plans across complex infrastructure hierarchies.
- Developed NetBox IPAM export and comprehensive overlap validation ensuring production-ready outputs.

Technologies: TypeScript, Node.js, Zod, NetBox
GitHub: github.com/gangster/subnetter

TECHNICAL SKILLS

- **Programming Languages**: TypeScript, JavaScript, Python, Ruby, Go, Bash, SQL, HCL, YAML

- **Cloud Platforms**: AWS, Azure

- **Infrastructure as Code & DevOps**: AWS CDK, Terraform, Terragrunt, Pulumi, CloudFormation, Atlantis, Ansible, Serverless Framework

- **Containerization & Orchestration**: Docker, Kubernetes, Helm, ArgoCD, Kustomize, Istio, Cilium, Calico, Traefik, AWS ECS, AWS Fargate, ECR, Packer

- **CI/CD Tools**: GitLab CI/CD, GitHub Actions, CircleCI, Azure DevOps, AWS CodePipeline, AWS CodeBuild

- **Databases**: PostgreSQL, MySQL, Aurora, SQLite, Redis, Valkey, ElastiCache, etcd, DynamoDB, Snowflake, Elasticsearch

- **Message Queues**: SQS, SNS, Kafka, RabbitMQ, Celery

- **Web Frameworks & Libraries**: React, Next.js, Remix, NestJS, Django, Ruby on Rails

- **Monitoring & Observability**: Datadog, Prometheus, Grafana, Loki, Tempo, CloudWatch, PagerDuty, OpenTelemetry

- **Networking & Security**: VPC, IAM, Route 53, CloudFront, ALB, NLB, WAF, KMS, ACM, Secrets Manager, Security Groups, NAT Gateway

- **Operating Systems**: Linux (Ubuntu, Amazon Linux), macOS

- **Version Control**: Git, GitHub, GitLab

CERTIFICATIONS

- Certified Kubernetes Administrator

- Certified Kubernetes Application Developer

- HashiCorp Certified: Terraform Associate (003)

- AWS Certified Solutions Architect – Associate

- AWS Certified Cloud Practitioner