Ayush Shende

ayushshende9@gmail.com ayushshende.com github.com/AyushShende25 linkedin.com/in/ayush-shende-708685413

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, SQL
Backend: FastAPI, Node.js, Express.js, REST APIs, WebSockets
Frontend: React, Next.js, Tailwind CSS
Databases: PostgreSQL, Redis, MongoDB
Cloud: AWS, Google Cloud Platform (GCP), Microsoft Azure
DevOps: Docker, Kubernetes, Helm, Terraform, Argo CD (GitOps), GitHub Actions, Jenkins, CI/CD, Linux

PROJECTS

Pizza Box – Full-Stack Food Ordering Platform on AWS API · Client · Admin · Infra (torn down to save costs)

Tech: FastAPI, Python, SQLAlchemy (async), PostgreSQL, Redis, Celery, WebSockets, React 19, TypeScript, Terraform, Kubernetes (EKS), Helm, Argo CD, GitHub Actions

- Built a modular **FastAPI** backend (async SQLAlchemy, PostgreSQL, Alembic) with **JWT cookie auth**, **Redis-backed refresh-token rotation**, Argon2 hashing, and **RBAC**; implemented menu management, **guest-to-user cart merging**, server-side pricing, and a validated **order status state machine**.
- Integrated **Razorpay payments** with HMAC signature verification, capture checks, and **idempotent row-locked verification** (SELECT FOR UPDATE), alongside cash-on-delivery; added sales analytics endpoints and S3 pre-signed image uploads.
- Delivered **real-time order and payment notifications over WebSockets**, fanned out across API replicas with **Redis pub/sub**, and offloaded transactional email to **Celery** workers.
- Shipped a **customer web app** and an **admin dashboard** (**React 19**, TypeScript, TanStack Query/Router/Table, Recharts) with live order tracking, infinite scroll, optimistic UI, and silent token refresh, hosted on **S3 + CloudFront**.
- Provisioned AWS with **16 Terraform modules**: multi-AZ VPC with isolated subnets, **EKS**, Multi-AZ **RDS** PostgreSQL, **ElastiCache** Redis, S3, CloudFront, ACM, Route 53, ECR, and **IRSA** roles with least-privilege IAM.
- Automated delivery with **GitOps**: **Helm** chart on EKS (HPA 2–6 replicas, health probes, non-root hardened containers), **Argo CD** app-of-apps with PreSync Alembic migration jobs, **GitHub Actions with OIDC** (no stored AWS keys), and **External Secrets** with AWS Secrets Manager.

Inkspire – Full-Stack Blogging Platform on AWS Live Site · API · Client · Infra

Tech: Node.js, Express, React 19, TypeScript, PostgreSQL, Redis, BullMQ, Terraform, Docker, AWS

- Built a **REST API** with **JWT access/refresh auth** (Redis-backed refresh tokens, HTTP-only cookies), permission-based **RBAC**, Zod validation, and hardening via Helmet, HPP, and rate limiting.
- Implemented draft/publish workflow, likes, bookmarks, **nested comments using recursive CTEs**, pre-signed S3 uploads, and **BullMQ** workers for queued transactional email.
- Provisioned the full environment with **Terraform**: multi-AZ VPC with public/private subnets, **Auto Scaling Groups behind an ALB**, Multi-AZ **RDS** PostgreSQL, **ElastiCache** Redis, S3 + CloudFront + ACM + Route53, least-privilege IAM, and SSM Parameter Store.
- Delivered a **React 19** client with a Tiptap rich-text editor, automatic token rotation via Axios interceptors, optimistic updates, and an admin analytics dashboard.

Spring PetClinic on AWS EKS Repo (deployed and verified, then torn down)

Tech: Kubernetes, Amazon EKS, Docker, eksctl, MySQL, EBS CSI, ALB Ingress, Route53, ACM, HPA

- Deployed on a **multi-AZ EKS** cluster with private worker nodes, topology spread constraints, a multi-replica Deployment, and a **StatefulSet for MySQL** on EBS-backed storage.
- Configured health probes, a **Horizontal Pod Autoscaler**, **AWS Load Balancer Controller** with ExternalDNS, and ACM-managed TLS.
- Secured the cluster with **IRSA**, **Kubernetes NetworkPolicies**, and hardened containers (non-root, read-only filesystem, dropped capabilities).

CERTIFICATIONS

- Microsoft Certified: Azure Administrator Associate (AZ-104) – verify
- Google Cloud Certified: Associate Cloud Engineer – verify
- Oracle Agentic AI Certified Foundations Associate – verify

EDUCATION

Bachelor of Engineering in Computer Engineering, ISBM College of Engineering, Pune – 2022 | CGPA: 8.63 / 10.0