Amod Dhopavkar

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EXPERIENCE

Goldman Sachs   Dec 2024 – Present
Software Engineer   Salt Lake City, UT
- Containerized 50+ microservices using Docker and Kubernetes with GitLab CI/CD, handling 1M+ daily API calls while improving deployment speed by 4x and achieving 99.999% uptime.
- Redesigned authentication system to zero-trust WebID architecture for 100M+ monthly transactions, eliminating cookie vulnerabilities and securing access for 50k+ users with zero downtime.
- Built ML-powered trade pre-clearance system on AWS EKS that processes 50k+ hourly compliance checks, reducing approval time by 10x and cutting risk violations by 85%.
- Architected event-driven compliance engine using Spring Boot and Kafka that processes 500k+ daily trades, automating regulatory reporting and reducing audit cycles from weeks to hours.
- Implemented observability stack with Prometheus and Grafana across distributed systems, reducing MTTR by 65% and enabling proactive incident detection for critical trading infrastructure.

DataRobot   May 2024 – Sep 2024
Software Engineer Intern   Boston, MA
- Built end-to-end ML deployment pipelines using Streamlit and TensorFlow serving 1k+ weekly users, cutting inference latency by 50% through model optimization and caching strategies.
- Designed TypeScript component library with Storybook documentation that reduced UI development time by 60% and standardized patterns across 5+ product teams.
- Optimized React application performance using code-splitting, lazy loading, and server-side rendering, improving Core Web Vitals scores by 40% for 100k+ enterprise users.
- Built real-time monitoring dashboards with Grafana for ML prediction services handling 10M+ monthly requests, establishing SLOs and reducing model drift incidents by 75%.

Addgene   May 2023 – Dec 2023
Software Engineer   Boston, MA
- Engineered real-time order tracking system using WebSockets and Kafka that processes 1M+ annual shipments with 98% accuracy, reducing customer support tickets by 50%.
- Optimized API performance with Redis caching and database query tuning, reducing p99 latency from 300ms to 50ms while handling 5x traffic growth without infrastructure changes.
- Built secure API gateway with OAuth 2.0, JWT authentication, and rate limiting using Node.js, preventing 99.9% of unauthorized access attempts on 200k+ biological materials repository.
- Migrated legacy monolith to microservices architecture on GCP with Istio service mesh and circuit breakers, improving system resilience and enabling independent team deployments.

Quantiphi   May 2021 – Aug 2022
Software Engineer   Mumbai, India
- Architected cloud data platform migration from Elasticsearch to BigQuery using Apache Spark, processing petabytes of data while reducing infrastructure costs by 40% and improving query performance by 15x.
- Built production data pipelines with Airflow and DBT processing 100TB daily, implementing data quality checks and lineage tracking that improved data reliability from 85% to 99%.
- Developed real-time fraud detection system using Spark Streaming and MLflow that analyzes 1M+ events per second, reducing false positives by 70% and saving $2M+ annually.
- Automated infrastructure provisioning with Terraform and GitOps workflows for 50+ environments, reducing deployment time from days to minutes while ensuring compliance and auditability.

PROJECTS

LaTeX Resume Builder – devcv.xyz   github.com/devcv.xyz
- Engineered a live-preview LaTeX résumé builder (React/Node/TS) that auto-saves in <200ms and exports 500+ PDFs monthly.

LeetCode PowerUp – Chrome Extension   github.com/leetcode-powerup
- Injects YouTube top solutions and a persistent scratchpad into LeetCode pages, saving 5k+ users an average 2min per problem.

EDUCATION

MS in Computer Science, Northeastern University   Sep 2022 – Dec 2024
BS in Computer Science, University of Pune   Aug 2017 – May 2021

SKILLS

Languages & Frameworks: Python, Java, JavaScript, TypeScript, C/C++, SQL, React, Node, Spring Boot, Flask
Cloud, DevOps & Data: AWS, GCP, Docker, Kubernetes, Terraform, Ansible, CI/CD, Apache Airflow, Kafka, MongoDB, Elasticsearch, BigQuery, Redis
Tools & Concepts: RESTful APIs, Microservices, Distributed Systems, Grafana, Prometheus, Git