

DATT PATEL

pdatt1230@gmail.com | <https://www.linkedin.com/in/dattpatel/> | <https://dattpatel.com>

EXPERIENCE

GEICO

Software Developer II

Cary, NC

February 2025 - Present

- Automated **geo-replication onboarding** and **resource deployment** for Kafka MirrorMaker2 applications eliminating on-call burden.
- Reduced** geo-replication onboarding time from **4 hours to under 10 minutes**, improving BCDR readiness for all teams.
- Consolidated control and data plane APIs, **migrating 40k+ records with zero downtime**, unblocking dependent projects.
- Designed and enhanced in-house Kafka Producer SDK with event streaming features **reducing client setup time** and increasing reliability for cross-language applications.
- Proactively took action to **reduce customer support tickets** for mTLS certificate setup by **designing a simplified authentication interface** for internal SDK.
- Developed centralized dashboards leveraging **Grafana** and **Prometheus**, standardizing alert templates and reducing setup time for custom alerts from **15 mins to 2 mins**.
- Mentored** junior engineers, guided feature-level design reviews, and provided best engineering practices resulting in junior promotions and improved team capability.
- Debugged **silent Kafka connection drops**, analyzing **TCP traffic** with **Wireshark** and researching mitigations, reducing retries from multiple per 100 messages to 1 per million.
- Researched and designed rate limiting and quota strategies to **prevent noisy neighbor** issues, **improve cost forecasting**, and enhance cluster reliability.
- Led guidance on pagination efforts for Cosmos DB to reduce **RU consumption by 30%**, while supporting horizontal scaling for Rest API.

GEICO

Software Developer

Cary, NC

March 2024 - February 2025

- Developed** core Kafka as a Service REST API ensuring high availability with 4 nines of availability and Tier 1 status.
- Designed **multi-tenancy support for topics and consumer groups**, preventing naming collisions and developong authorization access for 30+ teams.
- Implemented cross-cluster replication tooling and strategies for **Active/Passive consumer failover**, **reducing duplicate reads**.
- Created onboarding wiki with quickstart, architecture guides, and best practices, enabling **300+ engineers to self-service** Kafka onboarding, speeding up platform adoption.
- Modularized querying endpoints using OOP principles, **reducing code duplication** and onboarding time for new query types to under 250 lines.
- Implemented **safe deletion toggles** to **prevent accidental data loss** in Terraform and API operations, **increasing platform reliability** and **reducing operational mistakes**.

Animus Technologies

Backend Developer Intern

Los Angeles, CA

June 2023 - July 2023

- Enhanced stakeholder interface for task submission and configuration by improving UI/UX design through React.
- Reduced average computation time per process by ~60% through distributed task queue and concurrent processing.
- Transformed and designed database schema to store task results on AWS RDS & debugging reports on AWS S3 buckets.

Cyzma LLC

Full Stack Engineer Intern

Ahmedabad, GJ, India

April 2021 - July 2021

- Shipped 3 new customer-facing features, with 15 new UI pages decreasing customer navigation by 10 clicks for a single task.
- Enhanced Django backend to enable multi-tenant capabilities and facilitate easy addition of new clients through admin UI.

EDUCATION

University of Southern California

MS in Computer Science, GPA: 3.8/4.0

Los Angeles, CA

August 2022 - December 2023

Southern New Hampshire University

BS in Computer Science (Conc. in Software Engineering), GPA: 4.0/4.0

Manchester, NH

May 2019 - June 2022

SKILLS

Technical: REST APIs, Java, Python, NoSQL, MySQL, Spring Boot, Maven, Mockito, Kafka, Docker, Kubernetes, Terraform, Cosmos DB, CICD, Git, Cursor IDE

CERTIFICATES

- [HashiCorp Terraform](#)