

# Kartik Vyas

☎ +91 80034 86067 📁 portfolio in linkedin 👤 kartikvyas ⚡ dare20 ✉ vyaskartik20@gmail.com

## Experience

### Blinkit - Software Development Engineer

Gurugram,HR

#### Cost Management System

August 2024 – Present

- Architected and developed **cost calculation and attribution system** for fleet operations managing **INR 250+ crores in logistics costs** (4% of company revenue), leading to annual savings of **INR 3+ crores**
- Designed **Kafka driven modular and idempotent system architecture** using **several design patterns**
- Onboarded **Hyperpure** as new tenant and implemented **multi-tenure cost optimization strategies**
- Created **Cost Simulator** to allow ground team experimentation and manually approve trips
- Integrated **Celery driven CRONs** for tenure based cost settlements and used **Redis** to avoid **race conditions**

#### Fleet Management

- Developed **Distance Regulation system** to standardize **15K+ node-to-node mappings** across the country
- Built **Tolls Management platform** using Google Routes API managing **60K+ toll mappings**
- Implemented **Vehicle Management module** enabling easy onboardings of **5K+ vehicles** with tenure-based truck type and vendor selection workflows using **Python and Django**
- Enriched **Vendor Rate Card system using Celery** supporting multiple billing tenures and vehicle types with bulk upload, removal and approval functionalities, reducing ops team manual effort by **90%**

#### Driver Onboarding

- Engineered **identity verification pipeline using Django and Kafka** integrated with **third-party services and Gemini AI** for automated and manual quality checks
- Implemented **step-based workflow backend** and automated re-evaluation triggers upon suspicious activities
- Successfully onboarded **15,000+ drivers** while maintaining security standards (**200+ blacklisted**)
- Integrated **AWS Cognito and Lambda** for serverless authentication and OTP functionality

#### Technologies Used

- **Python, Django, Kafka, Redis, Celery, PostgreSQL, React JS, AWS, GraphQL**

### Morgan Stanley - Software Development Engineer and Intern

Bengaluru,KA

#### Trading Applications

July 2022 – Aug 2024

- **Sole contributor** for orchestration layer architecture in **multi-tenant trading platform using Spring Boot**
- Developed **microservices** for downstream data aggregation supporting order creation and status management
- Built **database synchronization tool** improving legacy-to-modern data consistency by **5%**
- Created **AI-powered technical solution generator** using **OpenAI APIs** for business problem resolution
- Built a Trading application in a Hackathon, achieving top **10% performance** in project simulations among peers

#### Summer Internship

May 2021 – July 2021

- Developed **Policy Networking Tool**, a **greenfield web application** serving **1K+ Financial Advisors** and integrated stored procedures and RESTful APIs via **Spring JDBC**

## Technical Skills

**Languages:** C++, Java, Python, C, TypeScript, HTML, CSS, SQL

**Frameworks and Databases:** Django, Spring Boot, PostgreSQL, MySQL, ReactJs, , GraphQL, REST, Microservices

**Tools:** Kafka, Celery, Redis, AWS (Cognito, DynamoDB, S3, Lambda, SQS), Zookeeper, Docker, Git

## Education

**Indian Institute of Technology Jodhpur**

*B.Tech in Computer Science and Engineering*

*June 2018 – May 2022*

*8.23 CGPA*

## Achievements

- CodeChef - 4 Stars[1917] and CodeForces - Expert[1714] and Global Round 10 - Rank 732/11678
- JEE Advanced 2018 - 2929 Rank [top 0.2%]