

# Akash Deep

2001akashdeep@gmail.com | 9065508862

## SKILLS

### Languages:

- Java • Python • SQL

### Frameworks / Libraries:

- Spring Boot • React.js • Django • Flask
- Node.js • Hugging Face • LangChain
- MCP • LangGraph • LLMs

### Databases:

- Neo4j • Pinecone • MySQL • MongoDB

### Cloud & DevOps:

- GitHub Actions (CI/CD) • Docker
- Kubernetes

### Tools:

- Git • Jupyter • Google Colab • VS Code

## ACHIEVEMENTS

- Flipkart Grid 5.0 - Attained a top 2000 national ranking and was among the top 10 college participants.
- Solved over 400+ DSA Questions across Platforms.
- Global Rank 3883 out of 31946 in LeetCode BiWeekly contest 125.

## LINKS

LinkedIn:// akashdeep

Github:// akashdeep

Portfolio:// akash-portfolio

Leetcode:// akashdeep

GeeksForGeeks:// akashdeep

HackerRank:// akashdeep

## EDUCATION

### Lovely Professional University

B.TECH in Computer Science and Engineering

2020-2024 | Punjab, India

CGPA: 7.65/10

### St.Joseph's School

Class 12(ISC)

2019-2020 | Bhagalpur, India

Percentage: 81%

### St.Joseph's School

Class 10(ICSE)

2017-2018 | Bhagalpur, India

Percentage: 81.6 %

## EXPERIENCE

### NATIONAL PAYMENTS CORPORATION OF INDIA (NPCI) |

#### ASSOCIATE AI ENGINEER

October 2025- Present | Hyderabad

- Engineered a multi-agent LLM system using **LangGraph** and **LangChain** for UPI operations: Q&A assistant for payment queries, mandate tracker for recurring payments, and grievance platform for transaction disputes, handling 10K+ monthly queries at **92%** resolution rate.
- Orchestrated **hybrid graph retrieval** framework with multi-hop **Neo4j** traversals, entity boosting, and end-to-end ingestion pipelines, improving complex UPI query resolution accuracy by **40%** with near-zero latency on 50K+ relationship nodes.
- Architected hybrid RAG system using **Neo4j + Pinecone** for **UPIHelp** Phase-2 that traces payment relationships (user → mandate → merchant → transaction), delivering **35%** more accurate answers to complex multi-entity queries compared to vector-only search.

### NATIONAL PAYMENTS CORPORATION OF INDIA (NPCI) |

#### GRADUATE ENGINEER TRAINEE

October 2024- October 2025 | Hyderabad

- Designed **Pydantic-AI** tool-calling infrastructure connecting 15+ UPI APIs for transaction lookup, complaint filing, and mandate status checks, processing **10K+** automated API calls monthly with **45%** faster response times.
- Implemented **Whisper-based** AI transcription and summarization system for internal meetings and documentation, accelerating report generation by **70%** and reducing manual note-taking effort by **50%** across teams.
- Built **fraud detection ML models** for International I-UPI to flag cross-border anomalies in real time, achieving **95%** accuracy with **20%** fewer false positives.

## PROJECTS

### HIGH-PERFORMANCE PRODUCT IMPORTER | GITHUB

FastAPI + Celery + Redis + Postgres

- Built a distributed ingestion pipeline capable of processing 500,000+ product records, cutting import time by **70%** using Celery worker parallelism.
- Integrated real-time progress tracking with Redis pub/sub and webhooks, improving operational visibility and debugging efficiency by **50%**.
- Achieved fault-tolerant import runs with retry logic, validation layers, and row-level error tracking, reducing data inconsistencies by **40%**.

### ELECTRICITY BILL MANAGEMENT SYSTEM | GITHUB

Java, SQL, Spring Boot

- Designed a Java-powered **Electricity Billing System**, automating processes and boosting operational efficiency by **60%**.
- Deployed real-time consumption tracking, cutting billing errors by **40%** and providing users with accurate cost insights.
- Established an **SQL** customer database, enhancing data precision by **45%** and speeding up record retrieval by **35%**.

## RESEARCH PAPER | LINK

Authored a research manuscript on **AI-assisted Self-Paced Learning Systems (EduHub)**, prepared for submission to IJARESM.