

# Kartik Dwivedi

Software Engineer | Distributed Systems  
at NIT Raipur

Mob.: +91-9125262649  
Email.: kartikdwivedi.work@gmail.com

## Links

Github:// [Link](#)  
LinkedIn:// [Link](#)  
HashNode:// [Link](#)  
Leetcode:// [Link](#)

## Skills

### OS

Linux, Windows

### LANGUAGES

Java, Javascript, Python, SQL

### DATA SCIENCE & ML

PyTorch, TensorFlow, OpenCV,  
Scikit-learn, Pandas, Numpy,  
Computer Vision, Redis

### FRAMEWORKS

ReactJS, Spring Data JPA  
NodeJS, TailwindCSS, JDBC, Gradle  
Spring Boot, Hibernate, JPA, Maven

### DATABASES

PostgreSQL, MongoDB, AstraDB

### OTHERS

Git, Github, Kafka, RabbitMQ  
REST APIs, AWS (EC2/S3), Docker,  
Postman, JUnit, Mobile Testing,  
Cypress, Jest, Mockito, Redis

## Coursework

Data Structures & Algorithms  
Database Management System  
Operating Systems  
Machine Learning  
Computer Networks

## Education

2021-2025 (EXPECTED)

B.Tech (Mechanical Engineering)  
NIT Raipur  
CGPA : 8.07/10

2018-2020

INTERMEDIATE (ISC)  
City Montessori School, Lucknow  
Percentage: 95.75%

2016-2018

HIGH SCHOOL (ICSE)  
City Montessori School, Lucknow  
Percentage: 91.4%

## Experience

FEB 2024-APRIL 2024

### [Zidio Development](#)

Software Engineering Intern

Built scalable RESTful APIs for location tracking and integrated Google Maps, improving real-time performance by 40%.  
Improved backend service performance by 12% via query optimization and caching strategies (Redis). [Test Driven Development]  
Collaborated with a global team & Refactored 1200+ lines of code, improving maintainability and reducing runtime errors by 32%.  
Contributed to Agile sprints with code reviews and CI.

*Typescript, NextJS, ReactJS, NodeJS, MySQL, Google Maps, GCP*

## Awards Achievements

DEC 2024

### [Smart India Hackathon 2024](#)

National Finalist

Engineered a secure, AI-powered face authentication system with deepfake detection, liveness verification, and emotion analysis for UIDAI Aadhaar services.  
Optimized model size by 96% (140MB → 5.5MB), improving inference time by 71%.

MAR 2024

### [30Hacks Hackathon by Hitachi & Globallogic](#)

Runner-up

Created an ML-powered mobile app for optimizing multi-modal transport, earning runner-up out of 2700 teams and a two lakh cash prize.

## Projects

MAR 2025

### [Ascend AI](#)

NextJS, NodeJS, TypeScript, Python, Machine Learning

Engineered a distributed tutoring platform with containerized microservices and RabbitMQ-based async processing; deployed via cloud-native architecture (AWS EC2) for ML-driven personalization.  
Containerized services with Docker, deployed on AWS EC2, and optimized for performance and fault isolation.  
Added health checks, retry logic, and monitoring hooks to ensure high availability and observability of distributed services.

JAN 2025

### [Airline Booking System](#)

Node.js, Sequelize, AWS EC2, RabbitMQ

Designed a distributed microservice-based backend for airline bookings, leveraging RabbitMQ for message orchestration and AWS EC2 for scalable deployment.  
Automated email notifications using Gmail SMTP and cron jobs for scheduled user updates.

DEC 2024

### [Samvaad](#)

React, Vite, Node.js, Express, MongoDB, WebRTC

Developed a full-stack real-time chat platform enabling users to connect through messaging, friend requests, notifications & video calls.  
Integrated a unique feature to match users interested in learning the same language, fostering collaborative language learning and global connections.

## Leadership & Extracurriculars

- Solved over 900+ DSA problems on different coding platforms.
- Winner & Finalist of multiple national hackathons, including SIH, 30Hacks (Hitachi & Globallogic), MindBend (Odo), VoyageHack, etc.