



Yaksh Bhesaniya

M.Tech

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Examination	Institute	Department	Year	CGPA
Post Graduation	IIT Bombay	CSRE	2027	9.05
Graduation	VGEC Ahmedabad	Information Technology	2024	8.88
Diploma	L.J. Polytechnic	Information Technology	2021	10.00

SCHOLASTIC ACHIEVEMENTS

- Secured **GATE (CS)** with **98.94 Percentile** and **All India Rank 1814** (Mar'25)
- Gold Medalist** in Diploma in Information Technology awarded by **Gujarat Technological University (GTU)** (Jan'22)
- Winner**, Hacktober Hacks Hackathon & Hackout'21 (Pre-made Projects Category) (Sep'21-Oct'21)
- Awarded **Best Student Award** in Diploma in Information Technology at **LJ Polytechnic** (Nov'19)
- Recipient of **Rajya Puraskar**, the highest state-level honor by **The Bharat Scouts & Guides**, awarded by the Honorable Governor of Gujarat for service and leadership (Feb'17)

WORK EXPERIENCE & INTERNSHIP

- Freelance Software Developer | Self-Employed** (Jun'24-Jun'25)
 - Built and delivered backend systems for **retail and healthcare clients**, using Node.js and REST APIs to support authentication, RBAC and database-driven business workflows in production.
 - Owned end-to-end backend development, from schema design to deployment-ready APIs, ensuring reliability and maintainability of client-facing systems.
- Software Engineer Intern | RapidOps Inc.** (Jan'24-May'24)
 - Developed and optimized backend APIs and database queries for production-scale applications.

KEY PROJECTS

- MobileBizPro: Real-Time Inventory & Sales Management System** (May'25-Jun'25)
 - Solved inventory visibility and profit-tracking issues for mobile retail businesses by designing backend workflows for sales, returns, supplier analytics and real-time stock valuation.
 - Improved backend responsiveness by offloading non-blocking operations using Redis-based async processing.
- Truck Booking & Logistics Optimization System (Uber-style Web App)** (Oct'25-Dec'25)
 - Reduced manual truck allocation and coordination overhead by automating booking, fare estimation and end-to-end vehicle tracking, enabling faster dispatch and better operational control using simulated GPS updates.
 - Implemented traffic-aware routing and dynamic driver assignment using FastAPI-based REST APIs.
- Smart Ambulance Routing & Emergency Response Analytics Platform** (Oct'25-Dec'25)
 - Enabled end-to-end visibility of emergency ambulance operations by designing GIS-based routing, trip logging and response-time analysis workflows to monitor delays, route efficiency and service coverage.
 - Identified demand hotspots and peak response patterns using spatial-temporal analysis and map visualizations.
- PCA-Based Multispectral Image Processing System** (Nov'25)
 - Addressed high spectral redundancy in multispectral satellite imagery by implementing Principal Component Analysis from scratch for effective dimensionality reduction and band decorrelation.
 - Built a Python GUI for principal component visualization and top-*k* image reconstruction, evaluated via MSE.

TECHNICAL SKILLS

- Programming Languages:** C, C++, Java, Python, JavaScript
- Backend & Frameworks:** Node.js, Express.js, FastAPI, Flask, REST APIs
- Web Technologies:** HTML, CSS, Bootstrap
- Libraries & Tools:** NumPy, Pandas, Git, Redis, \LaTeX
- Databases:** MySQL, PostgreSQL, SQLite, MongoDB
- Development Practices:** Agile Delivery, API Design, Code Reviews

KEY SUBJECTS COMPLETED

- Postgraduate Coursework:** Machine Learning, Satellite Image Processing, GIS, Remote Sensing
- Undergraduate Coursework:** DSA, Operating Systems, DBMS, Computer Networks, Software Engineering

POSITIONS OF RESPONSIBILITY

- Teaching Assistant**, IIT Bombay – assisted in lab sessions and grading for **30+ students**. (Jul'25-Present)
- Interview Coordinator**, Placement Office, IIT Bombay – ensured smooth execution of the **2025–26 campus placements** by coordinating company tests, PPTs and interview schedules. (Oct'25-Dec'25)
- Lead Organizer**, HackVGEC 2023 & TechXIT 2022 – organized **state-level hackathon and technical fest**, coordinating sponsors, mentors and participants across colleges. (2022-2023)