

RAJ MAKWANA

[Phone](#) | [Email](#) | [Linkedin](#) | [Github](#) | [Leetcode](#)

Education

Nirma University

August 2023 – June 2027

Bachelor of Technology in Computer Science and Engineering : Grade - 9.21

Ahmedabad, Gujarat

Relevant Coursework:

Data Structures, OOP, Algorithm Analysis, Database Management, Operating Systems, Software Engineering
Machine Learning, Reinforcement Learning, Soft Computing, NLP

Experience

Matterassist

January 2025 – December 2025

Full-Stack Engineer Intern

Ahmedabad, Gujarat

- Engineered the platform through best software engineering practices and **Agile Methodologies**.
- Built and maintained scalable **RESTful** APIs using **Node Js**, utilized **MongoDB** for data persistence and Cloudinary for object storage.
- Designed architecture of essential feature **Teams** from **end to end and scratch**, integrating modular components for team creation, team details-integrated **folder system** for team files with this, search member and request management.
- Developed Bill multi component including bill dashboard, letter pad bill info form and invoices section.
- Implemented notification for triggered event using React **Toastify** and profile view state to share user profile state efficiently across multiple components, used React **Context** API for both.

Projects

Event Driven Ledger | *PostgreSQL, Redis, Java, SpringBoot, Kafka, Docker* | [Github](#)

- Architected and built a **distributed**, event-driven ledger system using **CQRS** and **microservices**, enabling strict separation of write and read models with **Kafka**-based **asynchronous** communication.
- Designed a **resilient** command processing pipeline with **idempotency**, **transactional outbox pattern**, and **optimistic concurrency** with internal retry mechanisms to guarantee **consistency** under concurrent workloads.
- Engineered **high-performance** write model using **snapshot replay optimization** and read models using **PostgreSQL** projections, indexing and **Redis** caching, significantly reducing **latency** and improving **scalability**.
- Delivered end-to-end **system design** including **HLD**, **LLD**, API contracts, and **UML** artifacts (component, class, ER, sequence diagrams), applying **SOLID** principles, load balancing, and fault-tolerant distributed system patterns.

ChatGram | *MongoDB, React Js, Node Js, SocketIO, Gemini API* | [Github](#)

- Designed **interrelated Database schemas** and developed APIs for authentication using **JWT** and bcryptJs, **CRUD** of modules including profile, message and friend requests.
- Integrated **SocketIO** for live message syncing and Gemini API for AI chat bot interaction.

Technical Skills

Languages: C++, Java, Python, C, HTML/CSS, JavaScript

Databases: MySQL, MongoDB, PostgreSQL

Developer Tools: Git, GitHub, VS Code, Android Studio, Postman

Frameworks/Technologies: Spring Boot, Flask, MERN, Kafka, Docker, REST APIs

Concepts: Distributed Systems, Event-Driven Architecture

Cloud: AWS, Vercel, Firebase

Achievements

- Bronze Medalist**, First Year Engineering – Awarded for outstanding academic performance
- Hacktoberfest**'24 and '25 – Earned all-level badges through **Open Source Contribution**
- Leetcode **Knight** (Top 3.94%, Max rating.1916) – Achieved Rank 672 in Weekly Contest 471, 25,000+ participants
- Codeforces **Pupil** (Max rating.1300) – Achieved Rank 3347 in Round 1032, 30,000+ participants ([Profile Link](#))
- Atcoder **Green** (Max rating.864) – Achieved Rank 1583 in Round 423, 10,000+ participants ([Profile Link](#))
- IICPC CodeFest'25 Prelims – Achieved Rank **1,942**, 45,000+ participants ([Certificate](#))
- Meta Hacker Cup 2025 – Secured Rank **5,080** in Round 1 and **3,272** in Round 2 ([Certificate](#))

Leadership / Extracurricular

- NASA Space Apps Challenge 2024** — **Team Lead** – Our team became a **finalist (Top 5)** among **50+** teams in regional university competition
- Cubix 2025** — **Team Lead** – Our team won **3rd prize** in Competitive Coding Contest held by CSI Nirma Club