# Aaryan Mantri

### Malad West, Mumbai

## Education

## Sardar Patel Institute of Technology

Aug. 2023 - May 2027

Bachelor of Technology in Computer Science

CGPA: 9.14

## **Projects**

Khalo | Supabase, Gemini API, ExpressJS, NodeJS, React Native

April 2025

- Implemented the community feature in Khalo, a street food discovery platform, enabling users to post, like, and filter food-related content based on location.
- Engineered personalized stall recommendations by combining user **preferences** and **geospatial data** with Supabase and PostGIS; incorporated fuzzy matching to improve interest-based search results.
- Developed a swipe-based matching system that connects users with food stalls tailored to their current cravings and
- Integrated the Gemini API to automatically analyze user feedback and generate dynamic stall ratings using natural language summarization.

ProScript | ReactJS, NodeJS, ExpressJS, MongoDB, FastAPI, TensorFlow, GeminiAPI, OpenAI

April 2025

- Built a smart Prescription Manager using a rule-based system to predict side effects and analyze drug compatibility, factoring in allergies, pregnancy, and precision medicine.
- Designed a risk evaluation module to detect critical drug interactions and compatibility issues using a rule-based approach.
- · Applied fuzzy search to retrieve patient records with similar symptoms, highlighting treatment outcomes and side
- Integrated Gemini API for insights, used OpenAI OCR for parsing handwritten prescriptions, and added a hospital-wise feedback loop via **TensorFlow** to refine predictions.

Code Red | PostgreSQL, ExpressJS, NodeJS, ReactJS, Redux Toolkit, Redis

February 2025

- Implemented a graph-based storyline game with each level having its own concept mini-game.
- Optimized Real-Time Game State Management by using **Redis** as the primary database, reducing the average response time from 350ms to 50ms.
- Integrated PostgreSQL as a **Persistent Data Store**, periodically syncing with Redis to ensure data integrity and efficient recovery.
- Used **Redux persist** to maintain different states across all levels, preventing state reset on refresh.

Code Vault | MongoDB, ExpressJS, NodeJS, ReactJS, Redux Toolkit

August 2024

- Developed a GitHub inspired code snippet manager to create, share and export segments of frequently used codes.
- Implemented Version Control to maintain history of any code snippet along with adding the functionality of restoring if required by the user.
- Provided the options to Like, Save, or Fork a searched snippet which was internally achieved using MongoDB Compound Indexing, reducing the search time by 96%.

#### Technical Skills

Languages: Python, Java, C, C++, HTML/CSS, JavaScript, TypeScript Developer Tools: VS Code, Git, GitHub, Eclipse, IntelliJ, PyCharm

Technologies/Frameworks: ReactJS, ExpressJS, NodeJS, Tailwind CSS, Bootstrap, Redux Toolkit, Django, NextJS,

FastAPI, React Native

Databases: MongoDB, MySQL, PostgreSQL, Redis, Supabase

# Achievements

Specialist (max. 1421)

Present

Code forces

Winner of App Development

April 2025

SE Hackathon

CSI - SPIT

Finalist of CSI - SPIT Hackathon

February 2025

National Level Hackathon

Sardar Patel Institute of Technology

### Leadership / Extracurricular

Core Team - Training and Placement Office

January 2025 - Present

Statistics Head

Sardar Patel Institute of Technology August 2024 - Present

Students' Developer Club

Technical Head

Sardar Patel Institute of Technology