

Amrut Bhagwan Patankar

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1 Summary

I have Experienced in building full-stack applications and AI-integrated backends using **Express.js**, **FastAPI**, and **React**. Proven ability to deliver freelance client solutions and deploy scalable systems using **PostgreSQL** and **Supabase**.

2 Technical Skills

- **Backend:** Python, JavaScript, Express, Fastapi, Firebase, Supabase, Flask
- **Frontend:** HTML, CSS3, Tailwind, ReactJS, NextJS
- **Databases:** PostgreSQL, firestore, MongoDB
- **Cloud:** GCP, Render, Heroku, Vercel
- **Tools & Others:** Git, Github, Figma, Postman, Render, RESTful APIs

3 Experience

3.1 Fullstack Developer

Apr 2026 – Aug 2026

Payakt Pvt Ltd | Ezyhunt Ecosystem & Aayan Foundations

Ezyhunt Ecosystem — Backend Architecture & Cloud Infrastructure

- Re-architected the core data-fetching infrastructure across 8+ administrative modules. Replaced unconstrained queries with a highly efficient cursor-based pagination system, eliminating catastrophic data leaks and drastically reducing cloud billing costs while stabilizing the platform for scale.
- Optimized complex dashboard aggregations by shifting metric calculations to server-side processes and implementing multi-layered caching. This reduced dashboard data-load overhead from 400+ operations down to a single optimized query, eliminating browser memory crashes.
- Restored and stabilized critical financial and fleet-tracking administrative reporting modules, resolving execution failures to ensure accurate CSV/PDF data exports and real-time oversight for platform administrators.
- Managed end-to-end cloud infrastructure deployment on Google Cloud Platform (GCP), establishing automated CI/CD pipelines via GitHub for seamless updates to the dashboard and store panels.

Aayan Foundations — Full-Stack Platform & Custom Admin Suite

[Live Site](#)

- Architected and developed a comprehensive internal Admin Panel from scratch, providing a centralized ecosystem to manage operations, finance, donations, and volunteer logistics across 10+ dedicated modules.
- Designed a robust Role-Based Access Control (RBAC) security matrix, segregating data access across 4 administrative tiers and 16 granular permission categories to protect sensitive user and financial records.
- Engineered a high-performance server-side data architecture utilizing advanced client-side caching, strict server-side pagination, and **40+ composite database indexes**, ensuring instantaneous UI response times for complex filtering regardless of database scale.
- Integrated the Meta WhatsApp Business API and custom SMTP servers to fully automate operational workflows, including real-time user notifications, automated donation tax receipts, and application alerts.
- Developed secure backend services supporting Razorpay for one-time and recurring donations, alongside an automated server-side PDF generation engine for volunteer ID cards and certificates.

3.2 Frontend Developer (Part-Time)

May 2026 – Jul 2026

Navkon Labs

- **Annamrut:** Add key feature developed, architecture contribution, or performance improvement.
- **[Technical Stack]:** Add specific technologies used (e.g., React, Node.js, Python, PostgreSQL, REST APIs).

3.3 Freelance Full Stack Developer

Dec 2025 – Jan 2026

Client: Sangli Mahila Urban Co-op Society

[Live Site](#)

- Developed a landing page and admin dashboard using **React**, **PostgreSQL**, and **Supabase** (Auth & Storage), enabling the client to change website offers directly from the dashboard.
- Automated lead data entry by integrating user signups directly with **Google Sheets** using **Google Apps Script**, providing non-technical staff with real-time access to new client information.
- Translated client business requirements into technical specifications and delivered a deployed solution within 20 days.
- Eliminated the need for ongoing developer maintenance for minor content changes by empowering non-technical staff to manage content.
- Implemented **Row Level Security (RLS)** in PostgreSQL to ensure secure, role-based access for administrative dashboards.

3.4 Technical Member

2025 – Present

S4DS (Society for Data Science) Student Chapter

- Designed and deployed the **Nexathon** hackathon landing page ([Live Demo](#)), creating a dynamic, responsive UI that served **6,000+ visitors** in 10 days.
- Developed the official chapter website ([Live Site](#)) to introduce faculty and core committee members, utilizing modern frontend practices for optimal performance.

4 Projects

4.1 Ask My Policy — (Backend & AI Integration) Developer | Group Project

[GitHub](#) | [Live Demo](#)

Description: Designed the UI in **Figma** and developed the backend using **FastAPI** and **MongoDB** for an **AI-driven** health insurance recommendation platform.

- Integrated **Supabase** for **secure user authentication**, **analytics dashboards**, and **automated alerts** through **PostgreSQL** cron jobs.
- Built and connected **RESTful APIs** between the backend and **React** frontend for seamless data flow.
- Leveraged **Semantic Kernel** to integrate **Grok LLM** with **MongoDB**, enabling a **context-aware AI chatbot** that improved response speed and **reduced token usage**.

4.2 Crisis Response — Disaster Response Platform

[GitHub](#) | [Live Demo](#)

Description: Architected a full-stack crisis management solution enabling real-time collaboration between citizens and emergency services, featuring role-based access control and geospatial analytics.

- Developed three distinct, secure dashboards (Citizen, Coordinator, Agency) using **React** and **TypeScript**, implementing **Supabase Auth** and **PostgreSQL RLS** for robust data security.
- Integrated **Leaflet Maps** with **Supabase Realtime** to visualize incident clusters and track relief resources live, significantly reducing response coordination time.
- Built a **gamified engagement system** and **inventory management module**, leveraging complex SQL queries and database functions to track volunteer impact and optimize resource distribution.

4.3 IPL Outcome Predictor — Full Stack

[GitHub](#) | [Live Demo](#)

Description: Designed the UI in **Figma** and developed a **full-stack** web application that predicts IPL match winners based on the first 10 overs with 68% accuracy.

- Built entirely from scratch — from **data collection** and **preprocessing** for all IPL seasons to training a **Random Forest ML model**.
- Implemented the **backend using Flask** and connected it seamlessly to a HTML, CSS, and JavaScript frontend through **REST APIs** (tested using **Postman**).
- The system analyzes inputs such as pitch type, batting order, runs, boundaries, wickets, and dot balls to generate **real-time predictions**.

5 Certifications

- Harvard University's CS-50 certification, 2025
- NPTEL's Software Engineering certification, 2025

6 Achievements

- **1st rank, Spark-a-thon Project Competition** Oct 2025
Issued by Fr. Conceicao Rodrigues Institute of Technology (FCRIT), Vashi. Won for the "Ask My Policy" project.
- **1st Rank, Technical Paper Presentation** Oct 2025
Issued by Pillai HOC College of Engineering & Technology. Achieved 1st rank in the technical paper presentation competition.
- **Top 10, Incuverse 1.0 Hackathon** Oct 2025
Issued by K J Somaiya College of Engineering & riidl. Placed in the top 10 out of 345 teams in the 24-hour hackathon.

7 Education

Mumbai University, Mumbai, Maharashtra

Bachelor of Engineering in Computer Science (Data Science), 2027

CGPA: 9.10