# Vaibhav Sapaliya

📍 Mumbai, Maharashtra

✉ vvsvaibhav07@gmail.com    in linkedin.com/in/VaibhavSapaliya    ⊙ github.com/Vaibhavvs7

## Education

**Vidyavardhini's College of Engineering and Technology**                    2022 − 2026
Bachelor of Engineering in Computer Science
(Honors in Artificial Intelligence and Machine Learning)
- **CGPA:** 8.87
- **Coursework:** Operating Systems, Computer Networks, Database Management Systems, Object-Oriented Programming.

## Work Experience

**Web Developer Intern**                                        June 2024 − Sept 2024
*Aspiring Media Tech Pvt Ltd*, Vasai, Maharashtra
- Automated WhatsApp campaign dispatch with a PHP + RESTful API backend and PostgreSQL database, enabling one-tap delivery to 2,000+ recipients and reducing manual effort by 90%.
- Built a scheduling engine with cron jobs and controlled batching (5-second intervals), ensuring reliable and timely campaign execution without throttling.
- Developed interactive dashboards using JavaScript + Bootstrap to track delivery status, click-through rates, and user engagement in real time.
- Implemented secure role-based access control (admin, campaign managers, and view-only roles), improving access control and ensuring data integrity across the platform.
- **Tech Stack:** HTML, CSS, JavaScript, Bootstrap, PHP, RESTful APIs, PostgreSQL

## Projects

**AI-Powered Real-Time Collaborative Coding Platform**  |  GitHub                    **March 2025**
- Built an AI-powered collaborative development platform (Node.js, Socket.IO, Google Gemini) supporting real-time code editing, file scaffolding, and shared execution results.
- Implemented secure authentication with JWT + Bcrypt, and engineered scalable Node.js APIs with MongoDB persistence, planned to scale beyond 1,000 concurrent requests.
- Designed a responsive React UI with real-time presence, cursors, typing indicators, and a live project/file manager where AI-generated files integrate directly into the workspace — delivering estimated efficiency gains of ∼50% faster workflows and ∼35% reduced manual effort.
- Optimized performance with Redis caching for sessions, chat lists, and hot data, achieving significant latency reduction (∼40%) and high cache-hit rates (80%+) in testing to support high-throughput real-time traffic.

**Chat-with-PDF RAG**  |  *Node.js, LangChain, Pinecone, Google Gemini*  |  GitHub                    **July 2025**
- Built a Chat-with-PDF RAG pipeline (Node.js, LangChain, Pinecone, Google Gemini) indexing 50k+ PDF chunks, delivering source-cited, context-grounded answers with significantly improved precision and reliability.
- Engineered ingestion → chunking → embedding → Pinecone upsert flow, reducing 10k-PDF indexing time from several hours to under 10 minutes.
- Optimized chunking and top-K retrieval for sub-second responses (typically <200 ms Pinecone query latency, <500 ms end-to-end), with architecture created to scale to high query throughput.

## Skills & Technologies

**Languages:** Java, JavaScript, Python
**Frameworks & Libraries:** React.js, Node.js, Express.js, Socket.IO
**Databases:** MongoDB, MySQL, PostgreSQL, PL/SQL
**APIs & Authentication:** RESTful APIs, JWT, Clerk
**Developer Tools:** Git, GitHub, Postman, Docker, GitHub Actions.
**AI-Data Science:** Pandas, NumPy, Matplotlib.

## Certification & Achievement

- Solved over **300** DSA problems on LeetCode
- Achieved a contest rating of **1600+** on LeetCode
- Completed Data Structures and Algorithms (DSA) Certification Course by Apna College