TUSHAR NEBHNANI

AI Engineer | Full-Stack Developer | Pune, India | +91-8619264574
nebhnani.skn.comp@gmail.com | linkedin.com/in/tushar-nebhnani | github.com/tushar-nebhnani | tushardev.in

SUMMARY

Final-year Computer Engineering student who builds AI products end to end, from RAG pipelines and LLM agents to full-stack web apps. As an AI Intern, improved RAG accuracy by **20-25%** and OCR accuracy by **50%** in production. Works in Python (FastAPI) and TypeScript (Node.js, Next.js), with hands-on experience in AI agents and MCP.

EXPERIENCE

AI Intern | Pyrotech Technology Limited (Electrical and Switchgear) | Sep 2025
- Improved RAG answer accuracy by **20-25%** on technical documents by redesigning chunking, retrieval and prompt templates.
- Replaced a custom OCR pipeline with the Gemini API, raising document text extraction accuracy by **50%**.
- Reduced LLM hallucinations by tuning prompts and verifying responses against an external API, and added source-document tracing so users could check every answer.

Freelance Full-Stack Developer | Independent | Jul 2025 - Present
- Scope requirements with clients and ship full-stack apps with TypeScript, Next.js, Node.js, PostgreSQL and Redis.

PROJECTS

Kshetra - Climate-Adjusted Credit Risk Engine | FUSION 2K26 Hackathon (Fintech) | Oct 2026 | *Node.js, Python, LLM Agents, Twilio*
- Backend lead in a team of 3; built a climate-adjusted risk score for small-business lending in a 24-hour sprint.
- Scored each climate hazard from a single latitude/longitude using 30-year ERA5 history, CMIP6 projections, GloFAS flood data and live forecasts from 5 external REST APIs.
- Designed a grid-snapped cache that refreshes only stale data layers, and a guarded LLM agent that can raise a hazard with evidence but never remove one; automated SMS and email alerts via Twilio.

DSA Tutor - AI Coding Coach | *AI Agents, MCP, LLM APIs, Prompt Engineering*
- Built an AI tutor that guides learners through approach, pseudocode, dry run, code and complexity, hiding solutions.
- Exposed learner progress and solved-problem history as tools through a Model Context Protocol (MCP) server.

Olist E-Commerce Predictor | Oct 2025 | *Python, FastAPI, LightGBM, React* | olist-e-commerce-predictor.vercel.app
- Served 4 ML models through a FastAPI backend on the 100K-order Olist dataset: purchase prediction (LightGBM, **0.975 AUC**), satisfaction (XGBoost), review sentiment and SVD product recommendations.

Checkboxes - Real-Time Grid | Aug 2026 | *Node.js, Socket.IO, Redis, PostgreSQL* | checkboxes.tushardev.in
- Synced a 1,008-checkbox grid across all clients in real time with Socket.IO and Redis pub/sub fan-out; added JWT auth with rotating, single-use refresh tokens in httpOnly cookies.

EchoAI - Mentor Persona Chatbot | Jul 2026 - Sep 2026 | *TypeScript, Node.js, Express.js, Groq API*
- Built a chatbot that mirrors a mentor's tone and advice style using reusable, iteratively refined prompt templates.

Retail Analytics Dashboard | *Python, SQL, Pandas, Streamlit* | retail-dashboard-analysis-tushar-nebhnani.streamlit.app
- Built sales, inventory and RFM segmentation views over INR 7L+ revenue and 989 customers with SQL CTEs.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, SQL
Generative AI: LLMs, RAG, AI Agents, Prompt Engineering, Embeddings, Vector Search, OCR, LangChain, OpenAI API, Gemini API, Groq API, Hugging Face, Model Context Protocol (MCP)
Backend and Web: FastAPI, Node.js, Express.js, Next.js, React, Socket.io, REST APIs, JSON
Data and ML: Pandas, scikit-learn, LightGBM, XGBoost, Streamlit, PostgreSQL, MySQL, MongoDB, Redis, Prisma ORM
Tools: Git, GitHub, Docker, Linux, Vercel
Core CS: Data Structures and Algorithms, OOP, Operating Systems, DBMS

EDUCATION

B.E., Computer Engineering | Smt. Kashibai Navale College of Engineering, SPPU, Pune | 2023 - 2027 | CGPA: 8.41/10

Class XII (CBSE) | MDS Senior Secondary School, Udaipur | 2022 | 78%

ACHIEVEMENTS

- **Won INR 5,000 bounty** | SQL Case Study (Retail Analytics Dashboard), individual; featured by instructors
- **Won INR 10,000 bounty** | Machine Learning Case Study, team of 3

CERTIFICATIONS AND LEADERSHIP

- **HackerRank SQL (Advanced)** Certification | Jun 2025
- **Full Stack Data Science Cohort, ChaiCode** | In progress (Machine Learning, Deep Learning, NLP, GenAI)
- **Web Development Lead, IEEE Student Branch** | Led the web vertical; ran technical interviews for new members