Madhav Zanwar

Pune, India | madhavzanwar13@gmail.com | +91 8080956037 | linkedin.com/in/madhav-zanwar-395ba1389
github.com/madhavzanwar | Portfolio: madhavzanwar.vercel.app | leetcode.com/u/madhav_builds

SUMMARY

Second-year **Computer Science (AI & ML)** student building **deep learning models, LLM-powered tools and full-stack apps**. **HackerHouse Goa 2026 finalist (top 2.5%)** with **5 hackathon and research wins** in 2026, including **1st place at Synapse 1.0**. Web Developer Intern at PCCOE, former AI Intern at She Can Foundation, GDGC Competitive Programming Executive and **350+ LeetCode** problems solved.

EDUCATION

B.Tech in Computer Science (AI & ML) *(2025 – Present)*
Pimpri Chinchwad College of Engineering, Pune | CGPA: 8.32

TECHNICAL SKILLS

Languages	Python, C++, JavaScript, TypeScript, HTML, CSS, SQL, MATLAB
AI, ML & GenAI	Machine Learning, Deep Learning, Computer Vision (CNN, ResNet), NLP, Generative AI, LLMs, Retrieval-Augmented Generation (RAG), Embeddings & Semantic Search, Vector Databases (ChromaDB, pgvector), PyTorch, Scikit-Learn, Prompt Engineering, Gemini API, Claude API & MCP
Web & Frameworks	React, Next.js, Node.js, Flask, FastAPI, Streamlit, Flutter, Tailwind CSS
Data, Cloud & Tools	Pandas, NumPy, Matplotlib, Data Analysis, Jupyter, PostgreSQL (Supabase), Firebase, Vercel, Railway, Git, GitHub
CS Fundamentals	Data Structures & Algorithms (DSA), OOP, REST API Design

EXPERIENCE

Web Developer Intern *(Aug 2026 – Present)*
Office of Dean International, Pimpri Chinchwad College of Engineering (PCCOE), Pune | pccoeigc.com
- Built **4–5 pages** of the full-stack website for **Indradhanu**, PCCOE's International Grand Challenge
- Managed **1,000+ team registrations** on the platform, including their project submissions and follow-ups
- Maintaining **web-based solutions** and technical projects for the Office of Dean International

AI Intern *(Aug 2026 – Oct 2026)*
She Can Foundation | Remote (via Internshala)
- Built the **foundation's website** and organised **10,000+ records** using AI tools to support its initiatives

Executive – Competitive Programming *(Aug 2026 – Present)*
Google Developer Groups on Campus (GDGC), PCCoE
- Driving **coding initiatives, problem-solving activities** and **technical events** for the campus community

PROJECTS

PulseForge – Health Monitoring & Triage System *(Track Winner, YRC – 2026)*
ESP32, React, Flask, Scikit-Learn, Gemini | GitHub | Live Demo
- **What it is:** a wearable-sensor system that tracks a patient's heart rate, blood oxygen and temperature live and alerts the doctor when the patient's condition turns risky, with separate doctor and patient dashboards.
- Built the ESP32 sensor device (pulse-oximeter + temperature probe) streaming readings over Wi-Fi to Flask
- Trained Random Forest / Gradient Boosting models to detect **12 conditions** (e.g. sepsis, hypoxia)
- Gemini chatbot answers from the patient's own vitals in 3 languages; presented as a research paper at YRC

Vocalyze – Anonymous Employee Feedback Platform *(1st Place, Synapse 1.0 – 2026)*
Next.js, TypeScript, Supabase, pgvector, Gemini | GitHub
- **What it is:** a web app where employees report workplace problems by text, voice note or a photo of a paper slip **without revealing who they are**, and HR gets a dashboard to review and act on them.
- AI pipeline translates **40+ languages**, strips names and phone numbers, and tags theme, urgency and risk
- Anonymity enforced in the database: identity blocked, raw text deleted, audio not stored
- HR asks questions in plain English via **RAG search** (pgvector) citing the exact feedback

FinPilot – Personal Finance Copilot *(Finalist, Hack Matrix – 2026)*
Next.js, FastAPI, Firebase / GitHub / Live Demo

- **What it is:** a finance assistant that reads a user's bank transactions, scores their financial health and **predicts their balance for the next 90 days**, then suggests what to change.
- Health score built from 5 weighted pillars, including savings, liquid reserves and debt pressure
- Forecasts cash flow with a **Monte Carlo simulation** of 1,000 runs, giving a likely range instead of one guess
- Each answer is split into checked facts, predictions with confidence ranges, and actions ranked by impact

GreenYuva – Campus Climate Action App *(2nd Place, Eco Vision – 2026)*
Flutter, Dart, Firebase, Supabase, Gemini / GitHub / Live Demo

- **What it is:** a mobile app that gets college students to act on climate issues: they complete eco-tasks and quizzes to earn points, check local air quality, and swap used items like textbooks.
- Built 15 screens in Flutter for Android, iOS and web, with Firebase hosting and Supabase photo storage
- Geofencing and GPS show eco-tasks and swap listings only around the campus
- Pulls live CPCB air-quality data and IMD weather alerts; a Gemini tutor gives zero-waste tips

QuickSketch – Sketch Recognition Web App *(May 2026)*
PyTorch, CNN, Flask, Railway, JavaScript / GitHub / Live Demo

- **What it is:** a web app where you draw on a canvas and an AI model guesses the object (16 types, e.g. cat, house, lightning) in **under a second**, showing its top 3 guesses with confidence.
- Trained a convolutional neural network (CNN) on **64,000 sketches**, reaching **95.9% validation accuracy**
- Flask API on Railway converts each drawing into the 28x28 input the model was trained on
- Model-performance page shows the confusion matrix, per-class precision/recall/F1 and training curves

OTHER PROJECTS

- **Kisan Sathi:** Farmer app with leaf-disease detection, fertilizer calculator and voice help — GitHub | Live
- **MemoryVerse AI:** Gemini sorts certificates and reports into a timeline — GitHub | Live
- **Krishi Sahayak:** RAG chatbot answering only from Indian agriculture data, with sources — GitHub
- **TraceGuard:** AI expense tracker that auto-sorts spending and tracks budgets — GitHub | Live
- **Tech4Food:** Checks produce freshness from a photo and scans food labels for allergens (OCR) — GitHub
- **MathLab:** Double-integration lab with Desmos graphs, step-by-step solutions and a quiz — GitHub
- **PCA Face Recognition:** Eigenfaces in MATLAB, 93.75% accuracy on the ORL dataset — GitHub
- **Placement AI:** Scores resumes for placement readiness and runs mock interviews — GitHub | Live

ACHIEVEMENTS

- **HackerHouse Goa 2026 – Finalist:** **247 selected from 10,000+** (~2.5%) for the AI x crypto residency
- **Synapse 1.0, SIT Pune – 1st Place (Finance):** Built Vocalyze in an 8-hour hackathon
- **ResearchX, ITSA PCCOE – Winner (INR 6,000):** Wrote a research paper on water conservation on the spot and presented it to judges
- **YRC, AIML Pioneer's Summit 2026 – Healthcare Track Winner:** Research paper on PulseForge
- **Eco Vision, CiESA PCCOE – 2nd Place:** Presented GreenYuva, a campus climate-action app
- **MemoryVerse AI '26, Wooble – 3rd Place:** Built an AI document-memory system for students
- **Open Source:** **GSSoC 2026 (35,000+ applicants)**, IEEE SoC 2026; DREAMS, Diomede, WasmEdge
- **Competitive Programming:** **350+ problems** on LeetCode with the 100 Days Badge 2026
- **Reading Book Competition, PCCOE – 2nd Place (INR 2,000):** Equal Opportunity Cell event

CERTIFICATIONS & COURSES

- **Supervised Machine Learning: Regression & Classification** | *DeepLearning.AI, Stanford* *(Aug 2026)*
- **Claude Certifications (Building with the API, MCP)** | *Anthropic* *(2026)*
- **Google Prompting Essentials Specialization** (4 courses) | *Google* *(Jun 2026)*
- **Introduction to AI** | *Google* *(May 2026)*
- **Intro to Machine Learning** | *Kaggle* *(Jul 2026)*
- **Problem Solving (Intermediate)** | *HackerRank* *(Jun 2026)*
- **National Data Science Olympiad 2026** | *SRM IST Chennai* *(Aug 2026)*