ADITYA CHAUHAN

AI/ML Engineering | Full-Stack Development

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LinkedIn | GitHub | Hugging Face | LeetCode

PROFESSIONAL SUMMARY

Computer Science and Engineering undergraduate graduating May 2027, experienced in building AI-enabled web applications and training, evaluating, and deploying ML/DL models. Skilled in Python, PyTorch, scikit-learn, model explainability, FastAPI, and React; seeking AI/ML or software engineering internship opportunities.

EDUCATION

PES College of Engineering, Mandya — B.E., Computer Science and Engineering *Expected May 2027*
CGPA: 7.85/10 | **Class XII:** College of Commerce, Arts and Science (BSEB), 77.4% (2022)
Class X: Oasis Residential Public School (CBSE), 91% (2020)

TECHNICAL SKILLS

Languages: Python, C++, JavaScript, SQL **ML/DL:** PyTorch, TensorFlow, scikit-learn, Hugging Face Transformers, OpenCV, Gradio
Methods/Models: EDA, feature engineering, PCA, cross-validation, hyperparameter tuning, ensemble methods, SHAP, LIME, CNN, ViT, GPT-2, ResNet, Random Forest, Gradient Boosting, NumPy neural networks
Web/Tools: React, Node.js, Express, FastAPI, MongoDB, Socket.IO, Zustand, Vite, Tailwind CSS, Git, Jupyter, Google Colab, Hugging Face Hub, VS Code, Vercel, Render

SELECTED PROJECTS

FinishIt — AI-Powered Competitive Learning Platform *Updated May 29, 2026*
React, Node.js, FastAPI, MongoDB, Socket.IO, DeepSeek-V3 | Live Demo | GitHub

- Built a full-stack learning platform with six AI features powered by DeepSeek-V3 through a FastAPI microservice; added task planning, prioritisation, smart rescheduling, weekly reviews, AI code hints, and course discovery.
- Integrated Kanban planning, live study rooms, Codeforces contest tracking, YouTube OAuth sync, and resume/ATS analysis; deployed using Vercel, Render, and MongoDB Atlas.

Krishi Bazar — AI Smart Agriculture Platform *Updated May 24, 2026*
React, Node.js, FastAPI, MongoDB, Groq/Llama 3 | GitHub

- Co-developed a farmer-to-buyer platform featuring crop-disease detection, yield analysis, an LLM farming assistant, and a digital marketplace.
- Added voice input and text-to-speech to improve accessibility for rural users; combined a MERN stack with FastAPI-based AI services.

Cancer Risk Prediction — Explainable ML Screening Tool *Updated Jul 2025*
scikit-learn, SHAP, LIME, Gradio | Live Demo

- Trained and benchmarked nine classifiers and ensemble models for binary cancer-risk prediction; built a pipeline covering data cleaning, EDA, feature engineering, PCA, grid search, and cross-validation.
- Tuned decision thresholds to prioritise recall and reduce false negatives; used SHAP and LIME for global/local explanations and built a Gradio interface for individual and batch CSV predictions.

The Eye of Machine — Multi-Model Glaucoma Detection *Updated Nov 2025*
PyTorch, CNN–ViT hybrid, ResNet-50, VGG, AlexNet, LeNet | Live Demo

- Trained six deep-learning architectures on retinal fundus images; CNN–ViT hybrid achieved 90%+ accuracy by combining local CNN features with global Vision Transformer context.
- Applied data augmentation, learning-rate scheduling, and early stopping; deployed the models with model cards and an interactive Gradio inference app.

GPT-2 Custom Language Model Suite *2024*
Python, Hugging Face Transformers, TensorFlow | Colab Notebook
Fine-tuned GPT-2 for spam classification (85%+ F1) and text interpretation; improved training using gradient accumulation, learning-rate warmup, and early stopping on validation perplexity.

Additional Projects: Delhi Air and Weather Analysis (time-series EDA and pollutant trends); Neural Tic-Tac-Toe (NumPy neural network, manual backpropagation, RL strategy, GitHub); Discord bots (scheduled tasks and API integrations); React web apps (Vite, Tailwind CSS, REST APIs).

ACHIEVEMENTS AND CERTIFICATIONS

- **3rd Place**, Technovate for India Conclave (national-level AI-for-social-impact ideathon); **Top 10 of 200+ teams**, Innovate-a-thon and Fin-A-thon.
- Qualified for and participated in national-level hackathons; participant in the Amazon ML Challenge and Vibethon.
- Completed Coursera **Deep Learning Specialization** (Certificate); deployed six ML models to Hugging Face Hub with public interactive demos.
- **1st Place, College Powerlifting Competition** — Under-75 kg category, two consecutive years.