

Pranit Chilbule

📞 9763059811 | 📩 pranitchilbule1@gmail.com | LinkedIn | GitHub | HuggingFace

EDUCATION

Vishwakarma Institute of Technology, Pune
Bachelor's in Computer Science & Engineering (AI & ML)

2022 - 2026
8.93 GPA

EXPERIENCE

AI/ML Intern

Passion Infotech Pvt. Ltd | GANs, BERT, LLMs, TensorFlow, Computer Vision, Deep Learning July 2024 – Nov 2024

- Developed an **emotion-aware music and visual relaxation system** combining GANs, BERT, and computer vision to perform real-time facial emotion detection and generate personalized music with AI-driven immersive visuals.
- Implemented a complete pipeline for **real-time emotion analysis**, personalized music recommendation, and synchronized visual generation for therapeutic use cases. GitHub Repository.

AI Intern

Softgrowth Infotech | ML Pipelines, QGIS, APIs, Streamlit, XGBoost

June 2024

- Designed comprehensive **ML pipelines for AgriTech solutions** including pest & disease detection, crop yield prediction, price forecasting, soil analysis, and irrigation optimization using supervised learning algorithms.
- Built **geospatial intelligence tools** for pest mapping, geofencing, and intrusion detection using QGIS and weather APIs, enabling farmers to make data-driven decisions for improved productivity and resource optimization.
- Created **ML-powered REST APIs** and interactive dashboards using Streamlit, collaborating with agronomists to refine models and improve accuracy based on real-world feedback. GitHub Repository.

PROJECTS

Market & Financial Intelligence Multi-Agent System | Python, LSTM, LLMs, RAG, APIs

GitHub

- Created **5-agent LLM-driven system** for stock trend analysis, news summarization, and financial risk insights, integrating time-series LSTM models with external APIs (YFinance, Polygon, NewsAPI).
- Designed **RAG workflow** for personalized investment insights and deployed **cloud-based** dashboard for traders.
- Improved predictive accuracy by **15%** through agent interaction optimization and ensemble modeling techniques.

Inspect.AI – Institute Inspection System | Flask, YOLOv8, OCR, NLP, GenAI

GitHub

- Built end-to-end **AI platform for infrastructure inspection** using CNNs, YOLOv8, and image segmentation for automated compliance verification and facility assessment.
- Developed **OCR/NLP pipelines** for document understanding, faculty qualification verification, risk extraction, and integrated research score analysis using Scholarly API with automated SWOT generation via Gemini API.
- Performed **sentiment analysis on student feedback** and generated comprehensive automated reports, reducing manual inspection time by approximately **40%**.

Groundwater Level Predictor | Flask, XGBoost, Prophet, Geospatial Analytics, Folium

GitHub

- Developed predictive models using **XGBoost and Prophet achieving 90% accuracy** on spatiotemporal groundwater level estimation and water well prediction using supervised learning techniques.
- Performed **EDA and geospatial analysis** correlating hydrogeology, rainfall, elevation and tidal impacts on groundwater.
- Built **interactive Flask web application** with Folium for real-time prediction and water scarcity zone identification.

TECHNICAL SKILLS

AI/ML Frameworks: TensorFlow, Keras, PyTorch, Scikit-learn, OpenCV, Prophet, Plotly, Folium, Pandas, NumPy.

GenAI & NLP: LLMs, RAG Pipelines, VectorDB, LangChain, LangGraph, BERT, GANs, spaCy, OCR, Prompt Engineering.

Development & Tools: Python, Java, C, Flask, FastAPI, REST APIs, SQL, Git, GitHub, Streamlit, HuggingFace,

HTML/CSS, Bootstrap, React, VS Code, PyCharm, IntelliJ, Eclipse, Cloud, AWS, GCP, Docker, CI/CD Pipelines.

Coursework: Machine Learning, Deep Learning, Artificial Intelligence, Natural Language Processing, MySQL.

ACHIEVEMENTS

- Winner of 4 National Hackathons:** CAVISTA 2025, AIT SOLVEX 2025, Agri AI Hackathon 2025, and **Runner-up at Smart India Hackathon 2024** for developing innovative AI solutions. GitHub
- Honored with the **Best Project Award** by the department for Plant Disease Detection & Curing (March 2024).
- Published **3 Research Papers** in IEEE and Scopus-indexed conferences (Maitri 2024, ICICC 2025).
- Founder, Innovsphere Tech Club & College Council Coordinator** — Led a 200+ member tech community, driving GenAI and automation initiatives, and organized 10+ campus events (2023–2024).

CERTIFICATIONS & TRAINING

- IBM Data Science Professional Certificate | JobBaaj Data Analyst Certification | Generative AI by Microsoft
- Complete Data Science, Machine Learning, Deep Learning & NLP Bootcamp | Large Language Models GitHub