Purnima Sahoo

Bhopal, Madhya Pradesh

Education

VIT Bhopal University

2022 - 2026

Bachelor's in Computer Science and Engineering (B. Tech)

CGPA: 8.46

Technical Skills

Programming Languages: C/C++, Python, JavaScript, HTML, CSS

Artificial Intelligence: OpenAI Whisper, HuggingFace Transformers, LangChain, Prompt Engineering

Machine Learning: Scikit-learn, PyTorch, TensorFlow, Keras, Computer Vision Additional: Flask, Docker(basics), Git, GitHub Actions (CI/CD), Web Development

Extracurricular Activities

Smart India Hackathon | Qualified Finalist

Nov 2023 - Dec 2023

- Secured a finalist position by advancing through multiple rounds against 500+ competing teams.
- Architected and developed a high-accuracy system to detect and flag fraudulent social media profiles, leading to the team's selection for the grand finale.

Research and Development Lead | Linux Club, Cyber Warriors Club

Jan 2024 - Dec 2024

- Conducted in-depth research on audience engagement trends to optimize publication strategies.
- Streamlined workflows and conducted regular progress reviews, improving project efficiency by 4% and ensuring high-quality, timely deliverables.

Amdocs Graduate Gen AI Hackathon | Qualified Finalist

Jan 2025 - Feb 2025

- Earned national selection from a competitive pool of over 500+ students for developing an innovative GenAI-driven solution.
- Engineered a responsive and intuitive user interface using React.js and Tailwind CSS, ensuring a seamless user experience.

Projects (github.com/Purnima2004)

FAQ Chatbot | Transformers, LangChain, FAISS, Docker, Web Scrapping

https://course-craft-front.vercel.app/

- Developed a versatile AI chatbot that integrates a document analyzer, YouTube summarizer, and web content processor for intelligent, centralized Q&A.
- Engineered a RAG architecture using FAISS vector search and Hugging Face Transformers, improving overall task efficiency by over 30% and ensuring high-accuracy, context-aware responses.

Auto ML Solution | Scikit-learn, pandas, joblib, Plotly, Seaborn

https://automl-pro.streamlit.app/

- Built an automated machine learning pipeline that evaluated multiple machine learning algorithms at 90% accuracy.
- Tested the pipeline on 10+ real-world datasets and deployed the solution using Streamlit, enabling an interactive web interface with real-time predictions and a user-friendly experience.
- Explored expansion with LLM-generated access logs summaries and alert messages as a future enhancement feature.

AI Assistant | Python, LangChain, Groq API, OpenCV

https://ai-assistant-multilingual.streamlit.app/

- Developed a multilingual AI assistant capable of processing voice commands in English and Hindi
- Implemented specialized assistants (Reading, Walking, Navigation) with contextual task routing using LangChain.
- Added a fallback keyword detection mechanism for robust intent resolution in cases of LLM failure

Achievements

- Programming: Achieved an overall rating of 1500+ on competitive coding platforms.
- Coding Ninjas: Recognized as a Top Performer in the "Introduction to C++" course with a 94% score.
- IBM AI Engineering Specialization (Coursera): Achieved an overall score of 88.02% in the certification.