YACHANA ADHIKARI
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• GitHub • LinkedIn

Work History

AI Fellow | Fusemachines

Jun 2025-Nov2025 | Hybrid

Built a **news recommender web app** ; **CNNs and NLP**; applied **feature engineering, model tuning**, and **evaluation** with Python (NumPy, Scikit-learn, PyTorch). Gained hands-on experience in **responsible AI**, **bias mitigation**, and **technical presentations**.

Education

Tribhuwan University, BS in Computer Science, Sept 2022 – November 2026

• Coursework: Artificial Intelligence, Neural Networks, System Design, Software Engineering, Computer Architecture, ASP.net, Compiler Design, Computational Theory, Advanced Calculus

Skills & Certifications

Core Expertise:

 Prompt Engineering | Generative AI | Retrieval-Augmented Generation (RAG) | Multimodal AI

Certifications:

• **Google Cloud Skill Badge:** Prompt Design in Vertex AI

Technical Skills

Programming Languages:

• **Proficient:** Python
• **Familiar:** SQL, JavaScript, Asp.net

AI & Machine Learning:

• **Frameworks:** LangChain, PyTorch
• **LLM APIs:** Google Gemini, OpenAI
• **Vector Databases:** FAISS, MongoDB, SQL
• **Specialized Libraries:** Pyannote (Speaker Diarization), OpenAI Whisper (Transcription)

Web & API Development:
- FastAPI, Streamlit

Data Processing & Scraping:
- PyPDF2 (PDF Extraction), newspaper3k, Scrapy (Web Scraping)

Developer Tools:
- Git & GitHub, Google Cloud Platform (Vertex AI)

Projects:

AI Debate Video Analysis Engine | Python, FastAPI, Google Gemini, Whisper, Asyncio | **GitHub**

Built an end-to-end API that ingests a video, transcribes it with Whisper, identifies distinct speakers with Pyannote, and extracts key claims for analysis.

Implemented a concurrent asyncio pipeline that uses Google Gemini to fact-check claims, detect rhetorical fallacies, and generate a final, evidence-based verdict on the debate.

Analytical web apps | Python, Streamlit, Google Gemini

AI Business Insights Generator: GitHub

https://business-insights-ai.streamlit.app/

Takes user-defined topic and generates structured strategic frameworks, including SWOT analysis, market trends, competitive summaries.

News Research Analyst: GitHub

https://news-analyst1.streamlit.app/

Takes live article URLs, scrapes and parses content using the newspaper3k library and performs a multi-perspective analysis to identify media bias and key talking points.