YACHANA ADHIKARI Pokhara, Nepal

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• GitHub • LinkedIn

Work History

Al Fellow, April 2025-August 2025

Fusemachines - Hybrid

- Developed and deployed machine learning models using Python libraries (e.g., numpy scikit-learn, pytorch) for real-world applications.
- Gained hands-on experience in data preprocessing, feature engineering, model training, tuning, and evaluation.
- Understood AI ethics, bias mitigation, and responsible AI principles.
- · Presented findings through technical documentation, dashboards, or demo presentations.

Education

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

• Coursework: Artificial Intelligence, Neural Networks, System Design, Software Engineering, Computer Architecture, Comparison of Learning Algorithms, Computational Theory, Advanced Calculus

Skills & Certifications

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

Google Cloud Skill Badge: Prompt Design in Vertex Al Badge

Technical Skills

Languages: Python (Proficient), (SQL, Javascript) Familiar,

AI & Machine Learning:

Frameworks: LangChain, PyTorch **LLM APIs:** Google Gemini, OpenAl

Vector Databases: FAISS

Specialized Libraries: Pyannote (Diarization), OpenAl Whisper (Transcription)

Web & API Development: FastAPI, Streamlit

Data Processing & Scraping: PyPDF2 (PDF Extraction), newspaper3k **Developer Tools:** Git & GitHub, Google Cloud Platform (Vertex AI)

Web-scrapping(scrappy)

Projects:

Al 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

Al Business Insights Generator: <u>GitHub</u> 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: <u>GitHub</u>

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.