Anush Verma

+917388676933 | anush.verma247@gmail.com | www.linkedin.com/in/anush-verma | github.com/onusho

Education

CHRIST (Deemed to be University) — Bangalore, Karnataka
Master of Science (Artificial Intelligence and Machine Learning) — *July 2023 – Present*

Amity University — Lucknow, Uttar Pradesh
Bachelor of Computer Applications — *August 2020 – May 2023*

Projects

Local Insight | *Python, Ollama, Open Source LLMs, Weaviate, Google Gemini API, Docker, Streamlit* Source Code
- Developed a locally run multimodal RAG (Retrieval-Augmented Generation) chatbot, and search system supporting both text, image, audio, and video queries.
- Utilized Weaviate for vector-based semantic search, integrating Open-CLIP for advanced embedding generation and batch processing of data.
- Implemented dynamic query filters for precise retrieval across text, image, audio, video data, enhancing search relevance and performance.
- Designed a user-friendly interface for seamless interaction and real-time responses, with authentication.

Soul Match | *Python, Flask, MongoDB, Gemini API, Machine Learning, sklearn, pandas, nltk* Source Code
- Developed a web application that helps users meet like-minded individuals and form meaningful connections.
- Generated a custom dataset using Gemini API and transformed the data using pandas and nltk for preprocessing.
- Implemented a recommendation system that finds the top 10 best profiles for each user.
- Built the web application using Flask, HTML, and CSS, enabling seamless user interaction.
- Stored and managed user data efficiently in MongoDB, ensuring dynamic updates with each new profile.

Secure Stream | *Python, Image Processing, Cryptography, PyWavelets, NumPy, OpenCV* Source Code
- Built a robust blind invisible watermarking system using chaotic maps, wavelet transforms, and SVD.
- Used PyWavelets for multi-level decomposition, ensuring imperceptible and tamper-resistant embedding.
- Applied chaotic encryption for resilience against tamper detection, compression, noise, and frame modifications.
- Working on Deep Learning based approaches to the same problem.

Agentic Evaluation | *Python, Google Gemini API, Agentic AI, Multimodal Processing, Streamlit* Source Code
- Developed an AI-powered automated answersheet evaluation system using a multi-agent architecture to distribute tasks efficiently across specialized AI agents.
- Implemented dedicated agents for reading, verifying, researching, expert analysis, and evaluation, enabling modular, scalable, and accurate assessment.
- Leveraged Google Gemini's multimodal capabilities for high-accuracy text extraction and contextual grading of handwritten and typed responses.
- Built an interactive dashboard for real-time visualization of evaluation breakdowns, agent interactions, and grading insights.

Technical Skills

Programming Languages: Python, JavaScript, SQL
Web Technologies: HTML5, CSS3, RESTful APIs
Frameworks & Libraries: Flask, Node.js, Bootstrap CSS
Developer Tools: Git, Docker, Postman, NPM
Database & Cloud: MongoDB, PostgreSQL AWS, GCP
Data Science: Pandas, NumPy, Matplotlib, Pandas, PyTorch, scikit-learn
Testing: Selenium, PyTest, unittest

Certificates

Deep Learning Specialization | *Deeplearning.AI (Coursera)*
Statistical Learning with Python | *Stanford Online (edX)*