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PROJECTS

Intelligent Resume Analysis System using RAG

- Built an AI-powered resume analysis system to automatically screen and rank applicants based on resume-job matching scores.
- Utilized Retrieval-Augmented Generation (RAG) for understanding resume content and scoring relevance to job descriptions.
- Enabled automated shortlisting of top candidates, streamlining the recruitment process for faster decision-making.
- Tech stack: LangChain, Python, React.js

PlanPro

- Developed a web application to help users achieve their goals by generating optimised study plans based on user inputs.
- The application leverages modern web technologies for full-stack development and incorporates basic machine learning algorithms and GPT-3 for plan optimisation.
- Tech stack: MERN, Python, FullCalendar.js

Genetic Counseling Support System (GCSS)

- Designed and developed a database management system for analyzing genetic data to assist genetic counselors in assessing hereditary disease risks.
- The system integrates patient genetic test results, family history, and risk assessment algorithms to provide decision support and predictive insights.
- Tech stack: React, MySQL, Python

EDUCATION

PES University, BTech in Computer Science Engineering

2022 - 2026

- GPA: 8.28

Narayana College (PU)

- Percentage: 93%

SKILLS

Programming Languages: C/C++, Java, Python, JavaScript, SQL, R

Machine Learning: Scikit-learn, Pandas, NumPy, PyTorch

Cloud: Docker, Kubernetes

Web Technology: HTML, CSS, React, NextJS, Tailwind CSS, NodeJs, ExpressJs

Soft Skills: Teamwork, Collaboration

COURSEWORK

- **Generative AI Fundamentals** – LLM architecture, prompt engineering, fine-tuning, Retrieval-Augmented Generation (RAG).
- **Deep Learning** – CNNs, RNNs, Transformers, loss functions, optimization; implemented using PyTorch and TensorFlow.
- **Machine Learning** – Supervised/unsupervised learning, model evaluation, real-world pipelines (Scikit-learn, Python).
- **Computer Networks** – TCP/IP model, routing algorithms, congestion control, socket programming.
- **Operating Systems** – Process scheduling, memory management, file systems, concurrency.
- **Database Management Systems** – SQL, ER modeling, normalization, transactions, indexing, NoSQL.
- **Object-Oriented Analysis and Design (OOAD)** – UML, design patterns, SOLID principles, system modeling.
- **Data Structures and Algorithms (DSA)** – Arrays, linked lists, trees, graphs, sorting, recursion, dynamic programming.

Activities:

- Implemented **text classification and clustering models** using transformer-based embeddings in coursework mini-projects.
- Developed hands-on assignments with **Hugging Face Transformers** for summarization, QA, sentiment analysis.
- Fine-tuned pre-trained LLMs for specific use-cases using custom datasets.