PANCHAMI DINESH
Bangalore, Karnataka | Phone no: +91 9380014420
RV UNIVERSITY | COMPUTER SCIENCE ENGINEERING | 2023-2027 | CGPA-8.22

E-Mail Id: mailto:panchamidinesh17work@gmail.com
Linkdin: https://www.linkedin.com/in/panchami-dinesh-a116052a7/
Github: https://github.com/panchamidinesh
Languages known: English, Hindi , Kannada

Summary:
Detail-oriented tech enthusiast experienced in data analysis, visualization, and dashboard creation. Knowledgeable in AWS services and data pipeline development. Passionate about applying RAG models for semantic data retrieval and driven by curiosity, research, and innovative problem-solving.

Educational Qualifications:

Computer Science Engineering and minoring in Research from "RV University "   CGPA-8.2
 PUC from Surana Independent PU college   91.8%

Projects

- ***Automating Knowledge Discovery in Material Science with RAG Framework(Conference paper)|*** Materials science integrates chemistry, physics, and engineering to study materials' structure, properties, and applications. Using NLP and ML, a RAG-based system with MatSciBERT and FAISS retrieves and processes unstructured PDFs. Gemini then generates accurate, context-based answers, improving scientific data retrieval and research efficiency..|LINK

- ***Developed a Python-based Retrieval-Augmented Generation (RAG)* system** integrating MatSciBERT embeddings and FAISS for efficient semantic search across scientific PDFs. Implemented NLP workflows for query processing, text chunking, embedding, and similarity-based retrieval. Gradio for interface design and Google Gemini for generating accurate, context-aware scientific responses| . *link*

- ***Automated Reddit Data Pipeline for Airline Sentiment Analysis Using Prefect and AWS S3*|link**

- **Search Behavior–Driven Skill Demand Analysis using Analytics, NLP and RAG. |** Developed a skill demand intelligence system using Google Trends, time-series analysis, NLP clustering, and a FAISS-based RAG pipeline with an interactive Gradio interface. | LINK

- ***AI-Powered Project Recommender System*:** Built an intelligent Flask-based web app that suggests hardware projects from user-provided components using Sentence-BERT embeddings and fuzzy NLP matching for semantic understanding.| link

- ***Flight Delay Prediction Analysis*:** Built a flight delay prediction model using cleaned aviation data and machine learning techniques for accurate on-time vs delayed classification. Designed clear Power BI visuals to show delay trends and key factors| link.

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skills

Data Analysis using python(pandas, matplotlib | Power BI | Database Management | Data Visualization | Communication | Public Speaking | HTML | CSS | Python | LLM | NLP | RAG | Machine Learning | JAVA | C. |MySQL| AWS services |ETL Pipeline

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Certifications:

- Business Intelligence Using Power BI | link   AWS Cloud Quest: Cloud Practitioner | link
- Tata Group - Data Visualisation: Empowering Business With Effective Insights | link