PAVAN D

pavan.radapa@gmail.com | +91 7204163730 | https://www.linkedin.com/in/pavan-d-856231259/|
https://github.com/PavanDayanand | https://pavan-d.netlify.app/

SUMMARY

Highly motivated Computer Science & Data Science student skilled in Machine Learning, AI-driven applications, and modern frontend development. Experienced in building predictive models, interactive dashboards, and full-stack solutions using Python, SQL, React, TypeScript, and Redux Toolkit. Strong ability to turn complex data into practical, user-focused products.

EDUCATION

Bangalore Institute of Technology - VV Puram, Bangalore, India *CGPA: 8.44/10*
Computer Science and Engineering (Data Science) December, 2022 – Present

TECHNICAL SKILLS

- **Programming Language**: Python, JavaScript (ES6+), TypeScript, SQL (MySQL)
- **Frontend Development**: React.js, React Router, Redux Toolkit, Tailwind CSS
- **Data Science & ML:** Data Preprocessing, EDA, Feature Engineering, ETL, Supervised & Unsupervised Learning, Reinforcement Learning, Generative AI, LLMs
- **Frameworks & Libraries:** Pandas, NumPy, Scikit-learn, LangChain, FastAPI, Matplotlib, Seaborn
- **BI & Visualization**: Tableau, PowerBI, MS Excel (PivotTables, XLOOKUP)
- **Tools**: VS Code, Google Antigravity, Jupyter Notebook, MiniConda, Git, Figma

PROJECTS

1. **CLARITY** *April 2025 - November 2025*
   React | FastAPI | Python | Densenet121 | ResNet152 | Grad-CAM | CNN | RNN
   Developed a hospital-ready AI system for chest X-ray diagnosis integrating CNN, RNN, and Generative AI models. Implemented dual-model inference (DenseNet121 & ResNet152) with Grad-CAM explainability and automated report generation. Built a full-stack solution using React and FastAPI, producing clinician-grade PDF reports. Achieved 93% accuracy and AUC above 0.83 on the NIH ChestX-ray14 dataset with 112k+ images.

2. **EduGenie** *March 2025 - May 2025*
   Gemini API | LangChain | LLMs | Tailwind CSS | PyMuPDF | FastAPI
   Engineered a Generative AI-powered application to deliver intelligent academic insights from educational documents. The system uses an OCR pipeline built with PyMuPDF to automate data extraction, which reduced manual data entry efforts by 60%. Integrated Google Gemini API and LangChain with a FastAPI backend to process user queries, providing personalized feedback to students.

3. **Efficient Diabetes Risk Prediction Using KNR Models** *November 2024 - December 2024*
   Python | NumPy | Scikit-learn (KNN & Random Forest) | Matplotlib/Seaborn
   Built a machine learning-based diabetes risk prediction system using Random Forest and KNN, achieving 84% accuracy and F1-score of 0.80. Applied feature engineering, data preprocessing, and class imbalance handling. Implemented with Python, Scikit-learn, and Pandas for early healthcare diagnostics.

4. **InterConnect** *October 2024 - December 2024*
   ETL | Google BigQuery | Microsoft Power BI | Google Forms
   Managed data design and storytelling to build an interactive Power BI dashboard that analyzed opinion gaps between students, faculty, and clubs. Contributed to the data collection using Google Forms and performed ETL processing using BigQuery to clean and structure the data for analysis. The project was awarded 2nd place among 22 teams in a technical competition.

ACHIEVEMENTS & CERTIFICATIONS

- **2nd Place** in the "Turn Data into Stories" Exhibition for the InterConnect Project.
- **2nd Place** in GENAI Project Exhibition “From Queries to Creativity - MongoDB & GenAI” for the “EduGenie” Project
- **Juniper Networks Certified Associate, Cloud (JNCIA-Cloud)**.
- **Forage Data Visualisation: Empowering Business with Effective Insights.**