Prasad Patharla

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EDUCATION

B.Tech, Computer Science & Engineering 2022 - 2026
Hyderabad Institute of Technology And Management

Senior Secondary (XII), Telangana Intermediate Board 2022
Science

Vashista Junior College

Percentage: 76.70%

Secondary (X), Telangana Board Of Secondary Education 2020
Maheshwara High School

Percentage: 100.00%

TRAININGS / CERTIFICATIONS

Machine Learning
Jun 2024 - Present

Pantech Learning, Virtual

I'm learning Machine learning course in the Pantech Learning organisation

PROJECTS

EduMentor AI – Student Performance Prediction & Personalized Recommendation System
May 2025 - Jul 2025

EduMentor AI is an intelligent education analytics platform I developed to predict student academic performance using machine learning. This full-stack web application, designed specifically for the Hyderabad Institute of Technology and Management, utilizes Python, Streamlit, Scikit-learn, and MongoDB to provide personalized academic insights. I implemented dynamic role-based dashboards for Admins, Faculty, and Students/Parents to monitor performance, submit/view assignments, and access real-time analytics. The system generates downloadable PDF reports, explains predictions using SHAP, and suggests academic resources like eBooks, study plans, and career roadmaps. To make the tool accessible, I added multilingual support in English, Hindi, and Telugu. The application has successfully demonstrated how AI can help in reducing faculty workload by over 60% through automation and enhance personalized learning outcomes for students.

Diabetes Risk Prediction Web Application
Feb 2025 - Mar 2025

This project involved building a machine learning–powered health diagnostic tool using Logistic Regression and SHAP explainability to predict the risk of diabetes in individuals. The application collects key medical inputs such as glucose levels, BMI, age, and lifestyle factors, and predicts the probability of diabetes with visual explanations using SHAP values. I developed the frontend using Streamlit to ensure ease of use for patients and medical professionals. The application features a multilingual interface and allows users to generate PDF reports containing the prediction results, key influencing factors, and suggested lifestyle improvements. The project was aimed at increasing awareness and early intervention through a transparent and easy-to-use health screening tool suitable even for rural clinics and regional health camps.

Lung Cancer Detection Using CNN-Based Deep Learning

Dec 2024 - Jan 2025

In this project, I developed a deep learning model based on Convolutional Neural Networks (CNNs) to detect lung cancer from chest X-ray images. Using TensorFlow, Keras, and OpenCV, I created a robust pipeline that classifies X-ray scans into malignant or benign categories with an accuracy of over 92%. The model was trained on preprocessed grayscale images with real-time data augmentation and performance tuning using dropout and batch normalization layers. I built a Streamlit-based interface to allow doctors or users to upload X-rays, receive instant predictions, and view model confidence scores. This project aims to support radiologists with a fast, cost-effective, and AI-driven tool for early-stage lung cancer detection, especially in low-resource medical settings.

SKILLS

- English Proficiency (Written)
- MySQL
- Amazon Web Services (AWS)
- Java
- Power BI
- Telugu Proficiency (Spoken)
- Python
- Database Management System (DBMS)
- Data Analysis
- MS-PowerPoint
- Statistics
- VS Code
- MS-Excel
- Data Structures
- Hindi Proficiency (Spoken)
- MS-Word
- English Proficiency (Spoken)

EXTRA CURRICULAR ACTIVITIES

- I'm in the part of Google developer Student club as a Student chapter body member and Member of IndoUniversal collaboration for engineering education(IUCEE)

ADDITIONAL DETAILS

- I'm successfully completed Prompt Engineering course From IUCEE organisation and Artificial intelligence for all in Google skill boost