

Pavan Madnalwar

NASSCOM Certified Data Scientist / Top 8 percentile in Kaggle Competition

📍 Hyderabad 📞 +917798912330 📧 pavanmadnalwar2020@gmail.com

🌐 Pavan Madnalwar 🔄 pavanmadnalwar02

Summary

Detail-oriented Data Scientist with expertise in machine learning, deep learning, and data analytics. Skilled in building predictive models, analyzing large datasets, and driving actionable business insights. Adept at leveraging Python, SQL, and Power BI to deliver solutions that improve decision-making and business outcomes. Passionate about optimizing workflows through data-driven strategies, with experience across domains like banking, healthcare, and e-commerce.

Experience

Data Scientist

Real-Time Projects

- Experience in 10+ real-time, end-to-end Data Science and Data Analytics projects across domains such as Banking, Healthcare, E-commerce, and Human Resources, aligned with specific business requirements.
- Developed predictive models and machine learning pipelines to solve complex problems and provide actionable insights. Conducted Exploratory Data Analysis (EDA) to uncover trends, patterns, and key metrics from large datasets, driving data-informed decisions.
- Designed and implemented analytical solutions tailored to business requirements using Python, Structured Query Language (SQL), and Power BI. Built interactive dashboards and reports, leveraging advanced visualization tools to communicate insights effectively. Proficient in statistical modeling, data mining, and unstructured data analysis for optimizing business strategies and outcomes

Technical Skills

- **Programming Languages:** Python, SQL
- **Machine Learning:** Supervised Learning (Regression, Classification), Unsupervised Learning (Clustering), Feature Engineering, Model Optimization & Evaluation
- **Deep Learning:** Neural Networks (CNNs, RNNs, ANNs), Generative AI, Computer Vision, Natural Language Processing (NLP)
- **Statistical Modeling & Analysis:** Hypothesis Testing, Time-Series Analysis, Regression Analysis, Statistical Techniques
- **Data Science & Analytics:** Exploratory Data Analysis (EDA), Data Cleaning, Data Wrangling, Data Mining, Optimization
- **Frameworks & Libraries:** NumPy, Pandas, TensorFlow, Keras, scikit-learn, MediaPipe, OpenCV
- **Data Visualization & BI Tools:** Power BI, Matplotlib, Seaborn
- **Development & Deployment:** Flask, Streamlit
- **Tools & Platforms:** Jupyter Notebook, MySQL, googlecolab

Projects

Loan Eligibility Prediction

Banking & Finance

- Developed a machine learning model to predict loan eligibility based on key applicant features, such as income, age, credit score, loan amount, and employment status.
- Cleaned and transformed data, handled missing values, and identified critical features for optimizing model performance.
- Tested multiple machine learning algorithms, including Logistic Regression, K-Nearest Neighbors, Support Vector Machines, Decision Trees, Random Forest, Gradient Boosting, XGBoost, and Artificial Neural Networks, achieving an accuracy of **82%**.
- **Impact:** Reduced loan approval processing time and increased decision-making efficiency.
- **Skills:** Data Preprocessing, Feature Engineering, Model Evaluation, Classification, Predictive Analytics
- **Tools:** Python (Pandas, NumPy, Scikit-learn), Matplotlib, Seaborn

Salary Prediction

Human Resources/Employment

- Created a salary prediction model using machine learning to estimate employee salaries based on experience, education, and job role. Performed comprehensive data preprocessing, feature engineering, and model evaluation.
- Achieved **90% accuracy** using Linear Regression, Polynomial Regression, Lasso Regression, Ridge Regression, Decision Tree algorithms. Delivered actionable insights for HR teams to plan compensation strategies effectively.
- Skills:** Data Preprocessing, Feature Engineering, Model Evaluation, Predictive Analytics, Data Visualization
- Tools:** Python, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn

Age and Gender Detection using Deep Learning and OpenCV

Artificial Intelligence (AI)

- Built a real-time age and gender detection system using deep learning and OpenCV. Utilized a pre-trained Convolutional Neural Network (CNN) to detect and classify age and gender from facial images and video streams.
- Enabled real-time processing for applications such as surveillance and customer behavior analysis.
- Skills:** Deep Learning, Computer Vision, Facial Recognition, Real-Time Processing
- Tools:** OpenCV, TensorFlow/Keras, Python, NumPy

Music Recommendation System

Music Streaming

- Developed a recommendation system to suggest songs based on user preferences, leveraging collaborative filtering and content-based filtering techniques.
- Implemented algorithms to analyze song similarity scores and artist preferences for personalized song recommendations.
- Skills:** Machine Learning, Recommendation Systems, Collaborative Filtering, Content-Based Filtering
- Tools:** Python, Pandas, NumPy, Scikit-learn, Pickle, Streamlit, NLTK

Blinkit Sales Analysis

E-Commerce

- Analyzed \$1.2M in Blinkit e-commerce sales data, identifying top-performing products and optimizing inventory management across 15+ outlets, leading to a 20% reduction in stockouts.
- Conducted detailed analysis to identify high-performing products and optimize inventory management across outlets. Developed interactive dashboards in Power BI to improve sales strategy and decision-making.
- Skills:** Data Analysis, Sales Analytics, Business Intelligence, Dashboard Design, Trend Analysis
- Tools:** Power BI, Python (Pandas, NumPy), SQL, Matplotlib, Seaborn

Education

Maharashtra Institute of Technology, Aurangabad

Electrical Engineering

9.13 CGPA

B.Tech

Certifications

Full Stack Data Science and AI

NASSCOM

January 2025

python for Data Analysis

Great Learning

October 2024

[🔗](#) python for Data analysis

Languages

English

Hindi

Marathi

Telugu