

VIRAJ PITALE

Data Scientist

SUMMARY

Dedicated Data Science student at IIT Madras with expertise in Python, machine learning, deep learning and NLP. Experienced in building and deploying models using TensorFlow, scikit-learn, and FastAPI. Proficient in NLP, computer vision, and statistical analysis, with a passion for applying data-driven solutions to real-world challenges. Committed to continuous learning and innovation in data science.

SKILLS

- **Programming Languages & Tools:** Python, TensorFlow, scikit-learn, Pandas, NumPy, FastAPI, Flask, spaCy, OpenCV, Git
- **Machine Learning & Data Science:** EDA, Data Cleaning, Feature Engineering, Model Training & Evaluation, Hyperparameter Tuning, Supervised & Unsupervised Learning, Regression, Classification, Clustering
- **Deep Learning & NLP:** Neural Networks, CNN, RNN, LSTM, Image Processing, Data Augmentation, Text Classification, TF-IDF, Word2Vec
- **Web Development:** FastAPI, Flask
- **Core/Soft Skills:** Problem Solving, Analytical Thinking, Team Collaboration, Project Management (Scrum, Kanban), Presentation Skills

EDUCATION

Indian Institute Of Technology Madras

IIT Madras, India
Bachelor of Science in Data Science and Applications
Expected Graduation: June 2027

CERTIFICATIONS

- Relevant certifications are available on [My LinkedIn Profile](#).

PROJECTS EXPERIENCE

Plant Disease Classification with CNN

- Developed a CNN model to classify potato plant diseases (Early Blight, Late Blight, Healthy) with 98.6% accuracy and 0.0278 loss using TensorFlow and the PlantVillage dataset. Deployed the model via FastAPI with a real-time prediction interface using HTML/CSS.
- Tools: TensorFlow, Python, FastAPI, PlantVillage Dataset, HTML/CSS
- [LinkedIn Post](#) | [GitHub Repository](#)

Mumbai House Price Prediction

- Predicted house prices in Mumbai by developing and fine-tuning machine learning models, achieving 85%-90% accuracy. Deployed the model using FastAPI with a web frontend built with HTML, CSS, and JavaScript.
- Tools: Python, Pandas, scikit-learn, FastAPI, HTML/CSS, JavaScript
- [LinkedIn Post](#) | [GitHub Repository](#)

Loan Approval Prediction Model

- Built a loan approval prediction model using Random Forest and Gradient Boosting, achieving 98%-99% accuracy. Deployed the model with Flask and developed a user-friendly website interface for ease of use.
- Tools: Python, scikit-learn, Flask, HTML/CSS
- [LinkedIn Post](#) | [GitHub Repository](#)

SQL Challenge Project

- Transformed raw data into actionable business strategies using SQL for data manipulation, Excel for cleaning and visualization, and PowerPoint for presentation. Enhanced strategic planning through data-driven insights.
- Tools: SQL, Excel, PowerPoint
- [LinkedIn Post](#) | [GitHub Repository](#)

For a complete list of my projects, including videos and code, please visit [my portfolio site](#).