

Mutyalapati Akhil Kumar

makhil.vnk@gmail.com | +91-6302958788 | LinkedIn | GitHub

Objective

Aspiring Data Scientist skilled in Python, SQL, and machine learning. Experienced in deep learning, NLP, and predictive modeling. Passionate about building real-world AI/ML solutions and continuously advancing technical expertise.

Skills

Programming: Python, SQL, C++.

Machine Learning & AI: Supervised/unsupervised learning, CNNs, RNNs, LSTMs, NLP.

Tools & Frameworks: TensorFlow, Keras, Scikit-Learn, Pandas, NumPy, Matplotlib.

Data Visualization: Matplotlib, Seaborn, Streamlit.

Soft Skills: Problem-solving, teamwork, communication.

Projects

Brain Tumor Detection using Deep Learning [LINK] *Nov 2024 – Dec 2024*

- Designed and trained a CNN model on 1,000+ MRI images for brain tumor detection, achieving **85.81% accuracy**.
- Preprocessed and augmented MRI image data to improve model generalization.
- Visualized model performance using **Matplotlib**, including accuracy/loss trends and confusion matrix.
- Deployed a real-time tumor classification system with high precision and recall.

Loan Approval Prediction using Random Forest Classifier [LINK] *Jan 2025 – Feb 2025*

- Developed a machine learning model using Random Forest Classifier to predict loan approval outcomes.
- Trained on 58,645 samples with 13 features and tested on 39,098 samples, achieving **95.3% accuracy**.
- Performed data preprocessing including handling missing values, feature encoding, and normalization.
- Optimized model performance through feature selection and hyperparameter tuning using GridSearchCV.

Sentiment Analysis on Twitter Dataset [LINK] *Mar 2025 – Apr 2025*

- Analyzed 1.6M tweets (dataset size: $1,599,999 \times 6$) for sentiment classification using NLP techniques.
- Preprocessed text data by cleaning, tokenizing, removing stopwords, and vectorizing with **TfidfVectorizer**.
- Built and evaluated a Logistic Regression model, achieving 79% accuracy on sentiment prediction.
- Deployed the model via Render to allow users to input tweets and receive real-time sentiment results.

Education

Bachelor of Technology in Data Science

Sep 2023 – May 2027

Vellore Institute of Technology, Amaravati, India

CGPA: 8.1 / 10

Specialization: Machine Learning, Deep Learning, and Natural Language Processing