

VEDANT NIPANE

+91 9881420728

vedantnipane0@gmail.com

github.com/VedantNipane



linkedin.com/in/vedant-nipane-9759991b1/

Education

International Institute of Information Technology

2021-2025

B.Tech. (Honours) in ECE

Experience

Head Digital Works

June 2025 – Sept 2025

Associate Data Scientist

Hyderabad

- Conducted comprehensive product analytics on gaming platform's redemption workflows using SQL and Python, analyzing 5.6+ lakh game instances and 23+ crore wagered amounts to identify user behavior patterns and optimize withdrawal/redeem processes
- Designed and evaluated "Discounted Game Join" feature strategy through cohort analysis on 96K+ distinct players, projecting 38K net profit by analyzing user segmentation patterns and GST optimization opportunities on winnings bucket transactions
- Developed automated fraud detection reporting system for Leave Table Alerts using Python, SQL, and MicroStrategy, streamlining anti-fraud operations and reducing manual monitoring overhead for compliance team

Remote Labs, SPCRC, IIIT Hyderabad

May 2023 – May 2025

IoT Researcher

Hyderabad

- Led development of "Remote Titration" project for remote access and control through a web dashboard using Raspberry Pi, Python, and Blynk.
- Secured 1st place at Hyderabad 5G-6G Hackathon and 3rd place nationally at India Mobile Congress 2024.

Projects

TextFlow MLOps Pipeline | Python, DVC, MLFlow, Docker

August 2025

- Developed an end-to-end MLOps pipeline for text classification with automated data ingestion, preprocessing, feature engineering, model training, evaluation, and deployment using CI/CD integration
- Deployed Flask-based REST API for real-time predictions with MLflow experiment tracking and DVC model versioning

Speech Emotion Recognition with Multi-Feature Ensemble Learning | Python, SVM, NN

April 2025

- Developed emotion recognition system extracting MFCC and prosodic features at word, syllable, and utterance levels, implementing ensemble methods combining SVM, MLP, XGBoost, and LightGBM models with statistical validation
- Built multi-branch neural networks and conducted comprehensive spectrogram analysis using Praat software, demonstrating that feature granularity significantly impacts model performance across demographics

Time Series Forecasting and Anomaly Detection | Python, SARIMA, LSTM

May 2024

- Built a time series forecasting system using SARIMA and LSTM to predict future trends and analyze temporal data
- Developed an anomaly detection framework by analyzing forecast errors using rolling statistics and classifying anomalies with 1.5, 1.75, and 2 standard deviation thresholds

Cat vs Dog Image Classification | Python, CNN, Deep Learning

May 2024

- Developed a convolutional neural network (CNN) model to classify images of cats and dogs using a dataset of 18,000 training images with 80/20 train-validation split
- Achieved high performance with 97.59% training accuracy and 90.44% validation accuracy using a CNN architecture with multiple convolutional and dense layers, batch normalization, and dropout regularization

Tour and Travel Management | Python, SQL

March 2024

- Created a tour and travel agency management database using SQL and Python, implementing over 15 queries for comprehensive trip package management

Technical Skills

Programming Languages: Python, SQL, C, C++, MATLAB

Tools: Git, MLFlow, DVC, PowerBI, Docker, AWS

Libraries: Numpy, Pandas, TensorFlow, Scikit-learn, Matplotlib, OpenCV

Leadership & Achievements

- Led corporate sponsorship efforts as Corporate Team Head at E-Cell and Corporate Relations Executive for Felicity
- Secured 1st place at Hyderabad 5G-6G Hackathon and 3rd place nationally at India Mobile Congress 2024.
- Recipient of Research Award 2024 at IIIT Hyderabad.