VEDANT NIPANE

J +91 9881420728

Education

International Institute of Information Technology

2021-2025

B. Tech. (Honours) in ECE

Experience

Head Digital Works

June 2025 - Present

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

 $\mathbf{May}\ \mathbf{2023} - \mathbf{May}\ \mathbf{2025}$

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 20

- 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

Product Store: Full-Stack E-commerce Application () | React, Node.js, Express, MongoDB | September 2024

- Developed a full-stack e-commerce application for managing products using React, Node is, and MongoDB
- Created RESTful APIs with Express.js for CRUD operations and integrated MongoDB for data storage
- Built a responsive and user-friendly frontend with Chakra UI, ensuring smooth interaction for managing products

Custom Shell Implementation () | C, UNIX Commands

January 2024

- Implemented a UNIX-like shell supporting core commands (cd, echo, pwd) with persistent command history.
- Developed modular architecture with separate components for command parsing and directory operations.

Tour and Travel Management System () | Python, MySQL, pymysql

March 2024

- Developed a comprehensive database management system for automating tour and travel agency operations including trip package booking, tour guide assignment, and hotel/transportation coordination
- Implemented MySQL database with pymysql integration to handle CRUD operations for managing travel packages, guide allocation, hotel reservations, and transportation logistics

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.