

# Venkata Manideep Patibandla

New Haven, CT | Open to Relocation

Phone: (475) 287-5489 | Email: [pymanideep.analytics@gmail.com](mailto:pymanideep.analytics@gmail.com)

LinkedIn: [linkedin.com/in/manideep-analytics/](https://www.linkedin.com/in/manideep-analytics/) | GitHub: [github.com/patibandlavenkatamanideep](https://github.com/patibandlavenkatamanideep)

Portfolio: [venkatamanideep.com/](https://venkatamanideep.com/)

## Summary

Data Analyst and ML practitioner focused on the record of solving complex business problems through production-grade pipelines, reliable forecasting, and real-time computer vision systems. Skilled at transforming raw data into actionable insights, scalable models, and automated decision-making solutions.

## Technical Skills

**Technical Skills:** Python | SQL | Machine Learning | Applied AI | Generative AI | Large Language Models (LLMs) | Natural Language Processing (NLP) | Prompt Engineering | Statistical Modeling | A/B Testing | Feature Engineering | Model Evaluation | Predictive Modeling | Deep Learning (PyTorch | TensorFlow) | scikit-learn

**Tools & Platforms:** AWS | Data Pipelines | ETL | Docker | FastAPI | REST APIs | MLflow | MLOps | CI/CD | Tableau | Power BI

## Experience

### Data Analytics & Machine Learning Fellow Trainee

Jan 2026 - Present

#### ElevateMe

- Built SQL-driven data pipelines across 180+ relational tables on Azure, implementing Python-based ETL workflows that uncovered critical genre performance metrics and revenue distribution patterns.
- Analyzed entertainment industry revenue streams using statistical analysis techniques, identifying key growth opportunities and cross-market correlations between genres and event types.
- Produced interactive data visualizations using Tableau highlighting artist pricing variations and multi-year revenue trends, enabling executives to make data-driven decisions for talent acquisition and market expansion.

### Data Analyst

Aug 2025 - Present

#### Infosoft Solutions

Windsor, NJ

- Designed and optimized SQL-based data warehouse architectures processing 10k+ records/day, improving query performance by 45% through efficient schema design and data modeling.
- Performed A/B testing and cohort analysis on 50K+ user records measuring campaign effectiveness; translated complex analytical findings into business recommendations enabling data-driven decision-making.
- Applied Python (Pandas, NumPy, SciPy) and statistical analysis to large datasets (5K+ records), enabling predictive and diagnostic analytics with 92% model accuracy.
- Conducted exploratory data analysis and data quality assessments on multiple data sources; identified data anomalies, trends, and patterns providing recommendations reducing data discrepancies by 35%.
- Developed Tableau dashboards and analytical reports across 8+ business units, delivering actionable insights to stakeholders through interactive visualizations.

### Data Analyst Intern

Nov 2022 - Apr 2023

#### ION Technology Solutions

Vijayawada, AP

- Designed SQL-based data pipelines using Python (Pandas, NumPy), processing 50K+ records; performed data preparation, fulfilling the project with transformation, cleaning, and validation techniques, ensuring data quality.
- Conducted data mining and exploratory data analysis using statistical packages; analyzed datasets, paying attention to trends and patterns, extracting insights supporting business recommendations and diagnostic analytics efforts.

## Projects

### Astro Sales Forecasting Pipeline | [GitHub Link](#)

- Sales forecasts showed high variance across rolling time windows, reducing reliability for short-term planning under changing demand patterns.
- Built a modular end-to-end forecasting pipeline benchmarking statistical models against gradient-boosted regressors with rolling-window validation.

- Compared statistical baselines (Moving Average, ARIMA) with tree-based models (XGBoost, LightGBM) using error stability across rolling time windows, and built a Streamlit-based inference and visualization layer to enable scenario testing, diagnostics, and faster stakeholder decision-making.
- Achieved ~10–15% lower error variance compared to classical baselines and reduced forecast analysis time by ~20% using interactive scenario testing.
- Tech Stack: Python | Pandas | NumPy | scikit-learn | XGBoost | LightGBM | Streamlit

#### **Student Exam Performance Prediction | [GitHub Link](#)**

- Prediction quality was impacted by inconsistent data schemas and non-reproducible training and inference workflows.
- Implemented a configuration-driven ML pipeline with strict schema validation and modular preprocessing and modeling components.
- Eliminated invalid data ingestion and reduced experiment iteration time by ~25–30% through component decoupling and config-based control.
- Tech Stack: Python | scikit-learn | Pandas | NumPy | YAML-based configs

#### **Sure-Step Detection using YOLOv8 | [GitHub Link](#)**

- Falls were difficult to detect reliably in real time due to lighting variation, camera angles, and background motion in indoor environments.
- Built a computer vision-based fall detection pipeline using YOLOv8 with real-time inference and alert triggering.
- Evaluated model performance using precision/recall with targeted analysis of false positives and failure modes, validated robustness across varying lighting conditions, camera angles to reflect real-world deployment scenarios.
- Achieved ~8–12% improvement in detection precision while maintaining real-time performance.
- Tech Stack: Python | YOLOv8 | OpenCV | PyTorch

### **Education**

**Master of Science in Computer Science and Information Technology** | Sacred Heart University, Fairfield, CT

**Bachelor of Information Technology** | GMR Institute of Technology, Vizianagaram, AP

### **Certifications**

**Google Data Analytics Professional Certificate | [Credentials](#)**

### **Awards & Publications**

- Upsilon Pi Epsilon (UPE) Honor Society | Recognized for academic excellence, discipline, and outstanding performance in Computer Science.
- A Study on Deep Learning Approaches for Mood-Based Music Recommendation Systems | [Link](#)  
Designed and evaluated deep learning models for emotion-aware music recommendation, applying CNN-based architectures, feature extraction, and performance benchmarking.