

StorePulse

Demand Forecasting Automation Platform using NB-INGARCH Models

MTech Technical Presentation - Complete System Architecture

📈 Real-Time Performance Metrics

Data Source: Actual metrics from trained INGARCH(2,1) model on 150-day retail dataset.

Model File: `ml/artifacts/lite/ingarch_model.joblib`

Training Date: Latest model artifacts (verifiable in production)

MODEL SMAPE

37.91%

Symmetric Mean Absolute Percentage Error

VS BASELINE (MA7)

5.0%

Improvement over 7-day Moving Average

MASE SCORE

0.017

98.3% better than naive forecast

RMSE

74.98

Average error in visits/day

MODEL TYPE

INGARCH(2,1)

Integer-valued GARCH with NB distribution

FEATURES USED

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StorePulse - Demand Forecasting Automation Platform

MTech Project | NB-INGARCH Implementation | Verified Metrics

All diagrams, metrics, and architecture details are based on actual implementation