

Non-Technical Model Overview

Model Overview

My forecasting system predicts Euro Area inflation using machine learning techniques. By analysing economic indicators like commodity prices, exchange rates, and monetary policies, the model generates accurate monthly inflation forecasts. Key innovations include:

- Combining multiple models (XGBoost, CatBoost, SVR) into an ensemble for improved accuracy
- Providing uncertainty estimates with 90% confidence intervals
- Automatic retraining to maintain prediction quality as new data arrives
- Clear economic interpretation of results

The ensemble model achieves 0.28% RMSE accuracy, outperforming individual models. It successfully identifies inflation trends and provides early warnings about potential economic pressures, helping policymakers and analysts make informed decisions. The chart below showcase the final results.

