

# Pipeline Architecture - Cryptocurrency Volatility Prediction

Step	Description
1. Data Ingestion	Load historical Bitcoin OHLCV data from CSV.
2. Preprocessing	Clean missing values, handle invalid data, filter Bitcoin records.
3. Feature Engineering	Generate volatility, liquidity ratio, and rolling volatility.
4. EDA	Visualize correlations, trends, and distributions.
5. Model Training	Train Random Forest model on processed features.
6. Model Storage	Save trained model to disk using joblib.
7. Prediction UI	Deploy model via Streamlit app for user predictions.