

# Pipeline Architecture: Cryptocurrency Liquidity Prediction

## 1. Data Collection

- Import historical cryptocurrency data (price, volume)

## 2. Data Preprocessing

- Handle missing values
- Normalize numerical features (StandardScaler)

## 3. Exploratory Data Analysis

- Visualize distributions and trends

## 4. Feature Selection

- Select important features: price, 24h change, market cap

## 5. Target Transformation

- Apply log transformation on 24h volume

## 6. Model Selection & Training

- Train Linear Regression and Random Forest
- Evaluate using RMSE, MAE, R2

## 7. Model Saving

- Save trained model and scaler with pickle

## 8. Deployment (Optional)

- Streamlit web app for real-time predictions