

Final Report

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Objective:

Predict crypto liquidity using ML for early risk detection.

Dataset:

CoinGecko data for March 2022 - including price, volume, 1h/24h/7d changes, market cap.

Process:

1. Preprocessing: Cleaned, scaled, and converted date columns
2. EDA: Used bar plots and heatmaps to analyze trends
3. Feature Engineering: Added 3-day price average and liquidity ratio
4. Modeling: Used RandomForestRegressor
5. Evaluation:
 - R^2 Score: ~ 0.19 (due to small dataset)
 - RMSE: ~ 14.69
 - MAE: ~ 2.25
6. Deployment: Built a working Streamlit app

Outcome:

The model performs reasonably well considering data limitations and can predict liquidity ratios locally using a clean, interactive interface.