

Exploratory Data Analysis (EDA) Report

Introduction

- Dataset description: number of records, features, data sources.

Data Quality

- Missing value analysis (percentages per column).
- Duplicates check.

Data Distributions

- Summary statistics (mean, median, std) of numerical features.
- Histograms and boxplots for key features (c l o s e, v o l u m e, m a r k e t C a p).

Correlation Analysis

- Heatmap showing correlations between features.
- Insights on which features are most correlated with c l o s e price.

Time-Series Analysis

- Plot time trends of closing prices for top cryptocurrencies.
- Rolling volatility visualizations.

Feature Relationships

- Scatter plots of features vs target.
- Distribution of engineered features (e.g., Bollinger Bands, ATR).

Insights

- Volatility spikes correspond with price changes.
- Volume and market cap have moderate correlations with price.