

# Visualization Strategy for EDA

Systematic Workflow for Exploratory Data Analysis

1

## Data Loading

Import and understand data structure



2

## Univariate Analysis

Distributions, missing values, outliers



3

## Bivariate Relationships

Correlations, dependencies, patterns



## Multivariate Patterns



### Key Principles

- Systematic pipeline
- Automate repetitive plots
- Use small multiples (facets)
- Document insights iteratively



### Best Practices

- ▶ Start simple, add complexity
- ▶ Maintain visualization journal

**4**

Interactions, clusters, dimensionality

**5**

## Insights & Hypotheses

Generate actionable insights



- ▶ Compare across categories
- ▶ Iterate hypothesis  
→ viz → insight

### Balance

Breadth ↔ Depth

Many features ↔ Detail analysis