Descriptive Analytics

Descriptive methodologies focus on analyzing historic data for the purpose of identifying patterns or trends. Analytic techniques that fall into this category are most often associated with exploratory data analysis which identifies central tendencies, variations, and distributional shapes. Descriptive methodologies can also search for underlying structures within data when no *a priori* knowledge about patterns and relationships are assumed. This can include correlation analysis, exploratory factor analysis, principal component analysis, trend analyses, and cluster analysis. The following tutorials walk you through common forms of descriptive analytics.

Classical Analyses

- Numerical data desciptive statistics
- Categorical data descriptive statistics
- Assumption of normality
- Assumption of homogeneity
- Assessing correlations
- Univariate statistical inference
- Multivariate statistical inference
- Bootstrapping for parameter estimates

Text Mining

- Tidying Text & Word Frequency
- Sentiment Analysis
- Term vs. Document Frequency
- Word Relationships
- Converting Between Tidy and Non-tidy Formats

Unsupervised Learning

- Principal Component Analysis
- K-means Cluster Analysis
- Hierarchical Cluster Analysis