1 | multivariate analysis

- 1.1 | terms
- 1.1.1 | null hypothesis
- 1.1.2 | dependence if one set of variables can predict another
- 1.1.3 | interdependent analysis intercorrelations for underlying understanding
- 1.1.4 | metric vs non metric a metric variable is numeric
- 1.2 | then a bunch of methods for dependence analysis
- 1.2.1 |pick by matching which ones match your input/output variable types and numbers
- 1.3 | interdependent multivariate analysis
- 1.3.1 | factor analysis
 - 1. understand which variables highly correlate to others
 - (a) common factor analysis extracts factors that correlate
 - (b) principal component analysis extract factors that have the largest impact
 - 2. clusterananlysis
 - 3. multidimensional scaling
 - (a) obtain tabluar data from a weighted graph structure?
 - 4. corresponding analysis
 - (a) like factor analysis or something?
- 1.4 | important matrices
- 1.4.1 | data matrix
- 1.4.2 | **USSCP**
 - 1. data matrix multiplied by the transpose
- 1.4.3 | some other thing CSSCP
- 1.4.4 | covariance matrix (C)
- 1.4.5 | correlation matrix (R)
 - 1. variables normalized for mean 0 and stddev 1

Exr0n • 2021-2022 Page 1

- 1.5 | applications
- 1.5.1 | lots of fields

Exr0n • 2021-2022 Page 2