

Graph Classifier

Estimation of p-value for edges for signal subgraph

Calculate probability of an edge

Binary / Non-Weighted GLMs ${\bf Categorical}$ Parametric Signal Signal Whole Graph Subgraph (do Subgraph (do Non-Parametric at each node) at each node) Parametric Ρ NP(P) (NP) Binomial / (1-pval) Dimension (Pois / Norm Mutlinomial Weight edges reduction / Exp / ...) Fisher's Kruskalor (Random χ^2 ANOVA Forest / SVM / Wallis Test Exact Test KNN / ...)

Can use covariate adjustment

Whole Graph

(one model)

Dimension reduction,

but still

can adjust