Two sample testing in high dimensional problem

Shunan Yao

Two sample testing is long-lasting topic in statistics and useful tools for many fields. Classic two sample testing methods include parametric approaches, e.g., T-test, and non-parametric approaches, e.g., K-S test. In high-dimensional setting, two sample testing can be combined with modern statistical learning. However, this creates different problems such as overfitting or low power. In this project, we will study different methods for two sample testing and focus on the theoretical and empirical performances of different two sample testing methods in high dimensional problem.