

Final Year Project 2024/2025

Topic: Two-sample tests for high-dimensional data

Supervisor: Ming-Yen Cheng

Description: Two-sample testing is a fundamental problem in statistics and machine learning. The conventional Hotelling's T^2 -test is optimal when the dimension of the data is fixed and relatively low. However, when the dimension is high or even larger than the sample size, it either performs poorly or becomes inapplicable due to singularity or near singularity of the sample covariance matrix. In this project we will and apply to some real data sets different methods that can deal with this problem.