Principal component analysis

In class activities

Ranjeet Utikar

2023-08-20

# 1. Activities

1. Explore discriminant analysis by following steps given in [lda\_qda\_example.mlx](./lda_qda_example.mlx).
2. Explore PCA analysis by following steps given in [pca\_example.mlx](./pca_example.mlx).
3. Explore multivariate analysis for process monitoring using the MSPC app (GIEM, 2023).
4. Explore PLS modeling by following steps given in [pls\_example.mlx](./pls_example.mlx).

## 1.1 Reference

GIEM (2023). A benchmark software for MSPC (https://www.mathworks.com/matlabcentral/fileexchange/47169-a-benchmark-software-for-mspc), MATLAB Central File Exchange. Retrieved August 27, 2023.