Applied multivariate techniques

A Module of the course: Statistical Models

Livio Finos

A.Y. 2020/21, Dept Statistical Sciences, University of Padova

Course schedule

Regular Time: 09:30-12:00 (except for WED 24/02 09:30-11:00)

FRI 22/01   Matrix decompositions and Dimensionality Reduction.

TUE 26/01   Homeworks/mini-seminars.
Multidimensional Scaling, Independent Component Analysis

FRI 29/01   Homeworks/mini-seminars.
Canonical Correlation Analysis and extensions

WED 03/02   Homeworks/mini-seminars.
Modern multiple testing approaches

WED 10/02   Homeworks/mini-seminars.
Stability Selection

WED 17/02   Homeworks/mini-seminars.
Knockoff Methods

WED 24/02   Homeworks/mini-seminars.
Summary and insight into further research directions

Notes

A reference for part of the course is certainly K. V. Mardia, J. T. Kent, & J. M. Bibby (1979) *Multivariate Analysis.* New York: Academic Press.

The rest of the lectures will be based on research articles and didactic material provided by the teacher.

Despite the use of personal computer - together with a statistical software such as R, Python or Matlab - during the the classes is not mandatory, it may become useful from time to time.