CORSI A SCELTA

Corso: **APPLIED STATISTICS**

Docente: PROF. PIERCESARE SECCHI

Semestre: 1°

Lingua di erogazione: INGLESE

N° max studenti ammessi: 100

Modalità d'esame per non frequentanti: SI/NO

Note: /

LM COM 1 anno

✓

APPLIED STATISTICS

The course covers new approaches in the areas of statistical modeling and data analysis, using ideas that bridge the gap between statistics and computer science and developing tools for the statistical mining of big data. The focus is on predictive learning, with particular emphasis on recent advances in regression and classification.

Topics include: linear models; dimensionality reduction; supervised learning, regression and classification; unsupervised learning and clustering; assessing uncertainty through resampling methods. All methods will be illustrated using applications from marketing, finance, biology and other areas. The R free software environment for statistical computing and graphics will be extensively used and illustrated throughout the course and its lab sessions. Through the course, students are expected to work in team on a real data analysis project whose progress will be shown periodically to the class.

APPLIED STATISTICS

References:

1) James G., Witten D., Hastie T., Tibshirani R., (2013). An introduction to statistical learning, with application to R. Springer, New York
   http://www-bcf.usc.edu/~gareth/ISL/index.html
2) Statistical Learning MOOC by Hastie and Tibshirani (2014)
   http://www.r-bloggers.com/in-depth-introduction-to-machine-learning-in-15-hours-of-expert-videos/