



Fondamenti di 9 CFU Analisi dei Dati

from **data analysis** to **predictive techniques**

Prof. Antonino Furnari (antonino.furnari@unict.it)

Corso di Studi in Informatica
Dip. di Matematica e Informatica
Università di Catania



Università
di Catania

Data Analysis

Understanding your data



Description & Visualization



Correlation Analysis



Linear & Logistic
Regression



Statistical Tests

Predictive Techniques

Using data to make predictions



Classification & Regression



Overfitting & Regularization



Evaluation Measures



Model Selection

Data Representation

Revealing structure in the data



Data Representation &
Feature Extraction



Clustering &
Density Estimation



Dimensionality Reduction



Data Interpretation

Skills You Will Learn

Theoretical and practical data analysis skills



Python for Data Science



Data Acquisition & Management



Data Cleaning & Preprocessing



Exploratory Data Analysis



Data Visualization



Predictive Modeling

Career Paths

The course provides the foundations to become



Data Analyst



Business Intelligence (BI) Analyst



Data Scientist



Research Scientist



Analytics Consultant



Machine Learning Engineer



Lectures

72 hours of frontal lectures covering formal concepts and data analysis examples in Python



Exams

Two paths: in itinere tests and project and standalone exam with written text and project



In itinere tests

+



Guided group project

OR



Written exam

+



Individual project

Theses & Internships

Info & Notes

open source
on github

