## Data Analysis with Python

## Statistical Modelling with Statsmodels

- Statsmodels is a Python module that allows users to explore data, estimate statistical models, and perform statistical tests.
- An extensive list of descriptive statistics, statistical tests, plotting functions, and result statistics are available for different types of data and each estimator.
- Researchers across fields may find that statsmodels fully meets their needs for statistical computing and data analysis in Python.

## Features include:

- Linear regression models
- Generalized linear models
- Discrete choice models
- Robust linear models
- Many models and functions for time series analysis
- Nonparametric estimators
- A collection of datasets for examples
- A wide range of statistical tests
- Input-output tools for producing tables in a number of formats (Text, LaTex, HTML) and for reading Stata files into NumPy and Pandas.
- Plotting functions
- Extensive unit tests to ensure correctness of results
- Many more models and extensions in development