## 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