DIAML\_HW3\_Python Resources Prepared by the TAs

# **Hypothesis Testing**

Calculate the T-test for the means of two independent samples: <a href="https://docs.scipv.org/doc/scipv/reference/generated/scipv.stats.ttest">https://docs.scipv.org/doc/scipv/reference/generated/scipv.stats.ttest</a> ind.html

Calculate the T-test for the mean of one group

https://docs.scipy.org/doc/scipy/reference/generated/scipy.stats.ttest 1samp.html

## Correlation

This can be easily computed using either Numpy, Pandas or SciPy.

## See more information here:

https://realpython.com/numpy-scipy-pandas-correlation-python/#:~:text=Correlation%20coefficients%20quantify%20the%20association,comprehensive%2C%20and%20well%2Ddocumented.

## **Autocorrelation**

You could try any of the two approaches

#### Statsmodels:

https://www.statsmodels.org/stable/generated/statsmodels.graphics.tsaplots.plot\_acf.html

### Pandas:

https://pandas.pydata.org/docs/reference/api/pandas.plotting.autocorrelation\_plot.html