

## Test 6

Subject: Machine Learning for Data Science Period: 2019.2

In a <my\_first\_name>.ipynb file:

- 1. (12 pts.) From this paper:
  - (a) (3 pts.) Show table 1: statistics of the 68 time-series of daily sea surface temperatures (sst's) used for the study.
  - (b) (3 pts.) Show table 2: the first ten eigenvalues of the PCA of the time-series above.
  - (c) (3 pts.) Reproduce figure 2: circle of correlations of the temperatures' timeseries on the plane spanned by the principal axes 1 and 2 of the PCA of the time series.
  - (d) (3 pts.) Reproduce figure 3: the pattern of the daily measures of all buoys on the plane spanned by the principal axes 1 and 2.
- 2. (8 pts.) From this paper reproduce figures 1, 2, 3 and 4. Each graphic worths 2 points.

November 21, 2019