Brain Challenge

This project aim to analyze the relationship between a bunch of features computed on several NRM images of the brain of different patients and the age of those patients. The final purpose of this analysis is to attempt to detect those images' features that are better able to predict the patient's age and try to extract the biological meaning from this information.

The raw images database had already been pre-processed when it was sent to me. Therefore my work started with a dataframe with about 1000 features collected on almost 2000 samples (n_features = 954 and n_samples = 2631?).

Dimensionality Reduction

In order to accomplish a reduction in the dimensionality of the dataset I