Arthur DeGraw 04/22/2017

Udacity Data Analyst Nano Degree: Project 5

File List

Project files and descriptions of functions contained:

- exploratoryPlots.py:
 - load_data: just what It sounds like it loads the data from the given "final_project_dataset.pkl" and features list
 - make_plots: generates a sequence of histogram and box plots for univariate exploratory data analysis
 - transform_features: feature transformations with scaling (used log10)
 - o remove_outliers: removes outliers as specified by a percentage threshold
 - write_pkl: converts a features dataframe to a dictionary and then passes the classifier and data frame to the provided "dump_classifier_and_data" function
- poi_id.py:
 - train_multiple: performs a stratified cross validated training using a manual grid search for parameter tuning with PCA and and SVC model. Returns a data frame of models with parameters and performance metrics
 - train_best: performs PCA and trains an SVC on a training set that has been selected using the same stratified cross validation technique. Then the model and data are written with write_pkl and model, precision and recall are returned.
 - o A couple of new features are also created using code that is now commented out.