RIM-interpret Documentation

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1 get_pfi(fit, X_test, y_test)

get_pfi: calculates permutation feature importance (PFI) values for each predictor in the model
fit: fitted model
X_test: dataframe containing all predictors in the testing set
y_test: dataframe containing all target variable values in the testing set
returns: dataframe of mean PFI values for each predictor across 10 repetitions

2 get_shap(fit, X_test, model_type)

get_shap: calculates the mean SHAP value across all instances for each predictor
fit: fitted model
X_test: dataframe containing all predictors in the testing set
model_type: type of model ("Linear" or "Tree")
returns: dataframe of mean SHAP values across all instances for each predictor

3 get_lime(fit, X_train, X_test)

get_lime: calculates the mean LIME value across all instances for each predictor
fit: fitted model
X_train: dataframe containing all predictors in the training set
X_test: dataframe containing all predictors in the testing set
returns: dataframe of mean LIME values across all instances for each predictor

4 get_inter(fit, X_train, X_test, y_test, model_type)

get_inter: calculates the mean PFI, SHAP, LIME, and RIM values for each predictor
fit: fitted model
X_train: dataframe containing all predictors in the training set
X_test: dataframe containing all predictors in the testing set

y_test: dataframe containing all target variable values in the testing set
returns: dataframe of PFI, SHAP, LIME, and RIM values for each predictor