

logistic_regression

February 24, 2019

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In [1]: # binary clasification

from sklearn.datasets import load_boston
boston = load_boston()
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(boston.data, boston.target, test_s
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In [4]: import numpy as np
avg_price_house = np.average(boston.target)
high_priced_idx = (y_train >= avg_price_house)
y_train[high_priced_idx] = 1
y_train[np.logical_not(high_priced_idx)] = 0
y_train = y_train.astype(np.int8)

high_priced_idx = (y_test >= avg_price_house)
y_test[high_priced_idx] = 1
y_test[np.logical_not(high_priced_idx)] = 0
y_test = y_test.astype(np.int8)
```

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In [7]: from sklearn.linear_model import LogisticRegression
clf = LogisticRegression(solver='liblinear')
clf.fit(X_train, y_train)
y_pred = clf.predict(X_test)
from sklearn.metrics import classification_report
print(classification_report(y_test, y_pred))
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	precision	recall	f1-score	support
0	0.81	0.92	0.86	61
1	0.85	0.68	0.76	41
micro avg	0.82	0.82	0.82	102
macro avg	0.83	0.80	0.81	102
weighted avg	0.83	0.82	0.82	102

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In [ ]:
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