

封装机器学习算法--决策树

```
In [1]: from ML.decision_tree import DecisionTreeClassifier  
import numpy as np
```

```
In [2]: X = np.loadtxt('x.txt')  
y = np.loadtxt('y.txt')
```

```
In [3]: dt_clf = DecisionTreeClassifier()
```

```
In [4]: dt_clf.fit(X, y)
```

```
Out[4]: d=2, v=2.45, g=0.5, l=None
```

```
In [5]: dt_clf.tree_
```

```
Out[5]: d=2, v=2.45, g=0.5, l=None
```

```
In [6]: dt_clf.predict(X[:3])
```

```
Out[6]: array([0., 0., 0.])
```

```
In [7]: y_predict = dt_clf.predict(X)
```

```
In [8]: from ML.metrics import accuracy_score
```

```
In [9]: accuracy_score(y, y_predict)
```

```
Out[9]: 0.98
```

```
In [10]: dt_clf.accuracy_rate(X, y)    # 调用封装在决策树算法中的求准确率的函数
```

```
Out[10]: 0.98
```

```
In [11]: dt_clf.show_tree()
```