

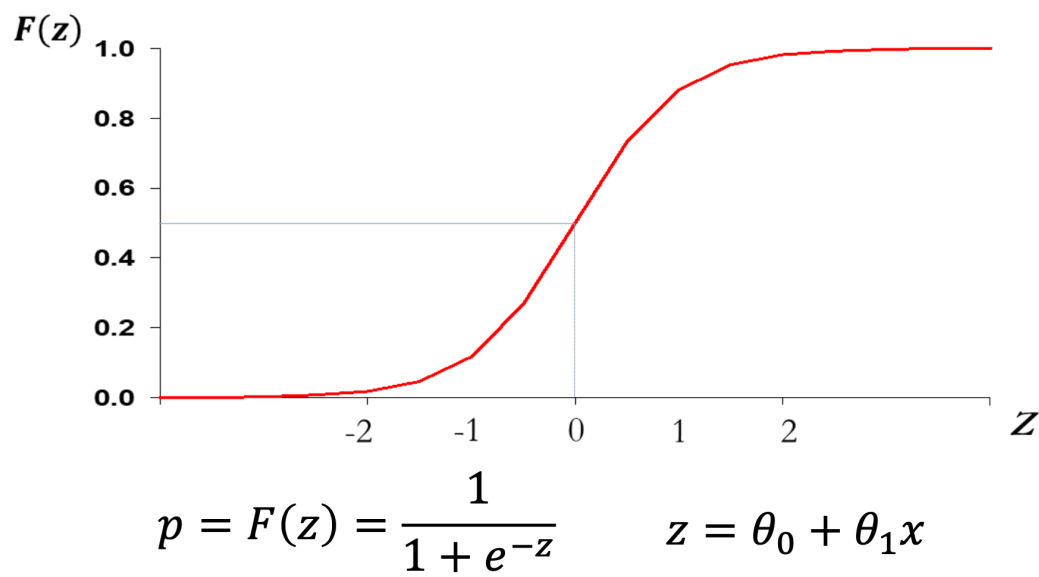
逻辑回归的材料补充

算法原理

logic func:

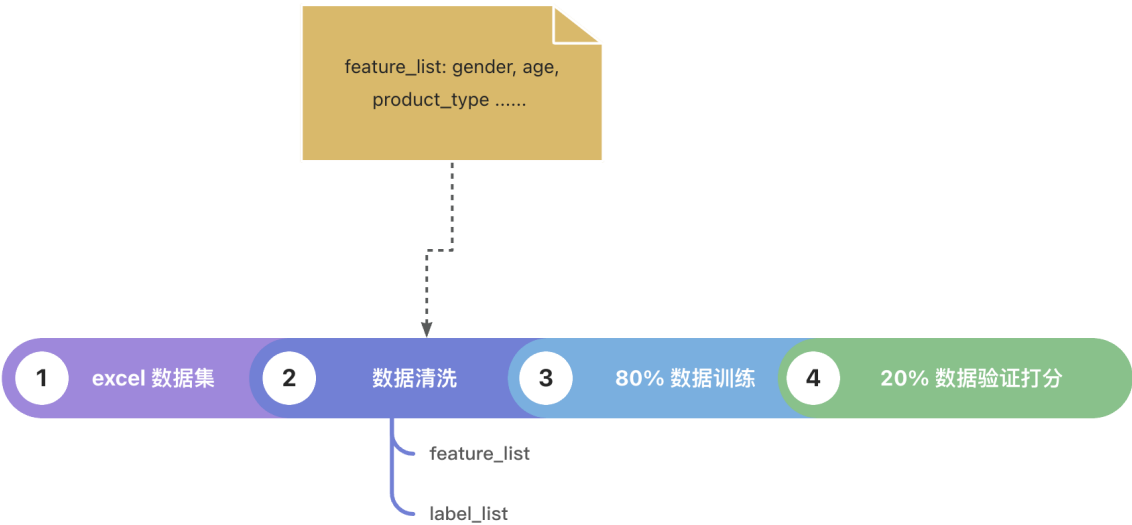
Logistic Function

$p = F(\theta_0 + \theta_1 x)$ $F(.)$ is the logistic function



z 的公式为: $z = \phi + \phi_1 x_1 + \phi_2 x_2 + \phi_3 x_3 + \dots$ 各个 x 为 各个 feature

整体流程图



代码截图

```
lr_model = LogisticRegression(max_iter=10)
# 使用百分之 80 的数据进行训练, 使用百分之 20 的数据进行测试
split_idx = int(len(dummyX)*0.8)
x_train = dummyX[:split_idx]
y_train = dummyY[:split_idx]

lr_model = lr_model.fit(x_train, y_train)
print("clf: " + str(lr_model))

# 训练完 使用决策树对测试集数据进行分类
test_x = dummyX[split_idx:]
test_y = dummyY[split_idx:]

y_pred = lr_model.predict(test_x)
print(
    classification_report(test_y, y_pred)
)

> .....

score = lr_model.score(test_x, test_y)
print("score: ----->", score)
```

代码运行评分截图

```
score: -----> 0.9235104669887279
LogisticRegression(max_iter=10)
```