

# 房价预测实验记录

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简单的线性层模型：

```
PS E:\深度学习实现 自己练手 (仅保存跑通的\kaggle房价预测竞赛> python
house_price_predict.py
正在从http://d21-data.s3-accelerate.amazonaws.com/kaggle_house_pred_train.csv下
载..\data\kaggle_house_pred_train.csv...
正在从http://d21-data.s3-accelerate.amazonaws.com/kaggle_house_pred_test.csv下
载..\data\kaggle_house_pred_test.csv...
(1460, 81)
(1459, 80)
   Id  MSSubClass MSZoning  LotFrontage SaleType SaleCondition  SalePrice
0    1           60      RL           65.0      WD      Normal    208500
1    2           20      RL           80.0      WD      Normal    181500
2    3           60      RL           68.0      WD      Normal    223500
3    4           70      RL           60.0      WD  Abnormal    140000
折1, 训练log rmse0.169932, 验证log rmse0.156398
折2, 训练log rmse0.162221, 验证log rmse0.190104
折3, 训练log rmse0.164134, 验证log rmse0.168323
折4, 训练log rmse0.167987, 验证log rmse0.154760
折5, 训练log rmse0.162652, 验证log rmse0.182861
5-折验证: 平均训练log rmse: 0.165385, 平均验证log rmse: 0.170489
训练log rmse: 0.162404
模型已保存为 kaggle_house_price_model1.pth
```

我改成了复杂的MLP模型：

```
PS E:\kaggle房价预测竞赛> & "C:/Program Files/Python313/python.exe" e:/kaggle房价预
测竞赛/house_price_predict.py
(1460, 81)
(1459, 80)
   Id  MSSubClass MSZoning  LotFrontage SaleType SaleCondition  SalePrice
0    1           60      RL           65.0      WD      Normal    208500
1    2           20      RL           80.0      WD      Normal    181500
2    3           60      RL           68.0      WD      Normal    223500
3    4           70      RL           60.0      WD  Abnormal    140000
训练数据形状:
数值特征: torch.Size([1460, 36])
类别特征: torch.Size([1460, 43])
标签: torch.Size([1460, 1])
数值特征范围: -4.749858856201172 到 31.154592514038086
类别特征范围: 0 到 24
标签范围: 34900.0 到 755000.0
数值特征中NaN的数量: 0
数值特征中inf的数量: 0
类别特征中NaN的数量: 0
标签中NaN的数量: 0
折1, 训练log rmse0.182569, 验证log rmse0.169754
```

折2, 训练log rmse0.166355, 验证log rmse0.174465  
折3, 训练log rmse0.168324, 验证log rmse0.187972  
折4, 训练log rmse0.180917, 验证log rmse0.166306  
折5, 训练log rmse0.167898, 验证log rmse0.179757  
5-折验证: 平均训练log rmse: 0.173213, 平均验证log rmse: 0.175651  
训练log rmse: 0.161875  
模型已保存为 kaggle\_house\_price\_model2.pth  
PS E:\kaggle房价预测竞赛>