

# 我們與R的距離

資料集介紹

House Prices: Advanced Regression Techniques

# Kaggle

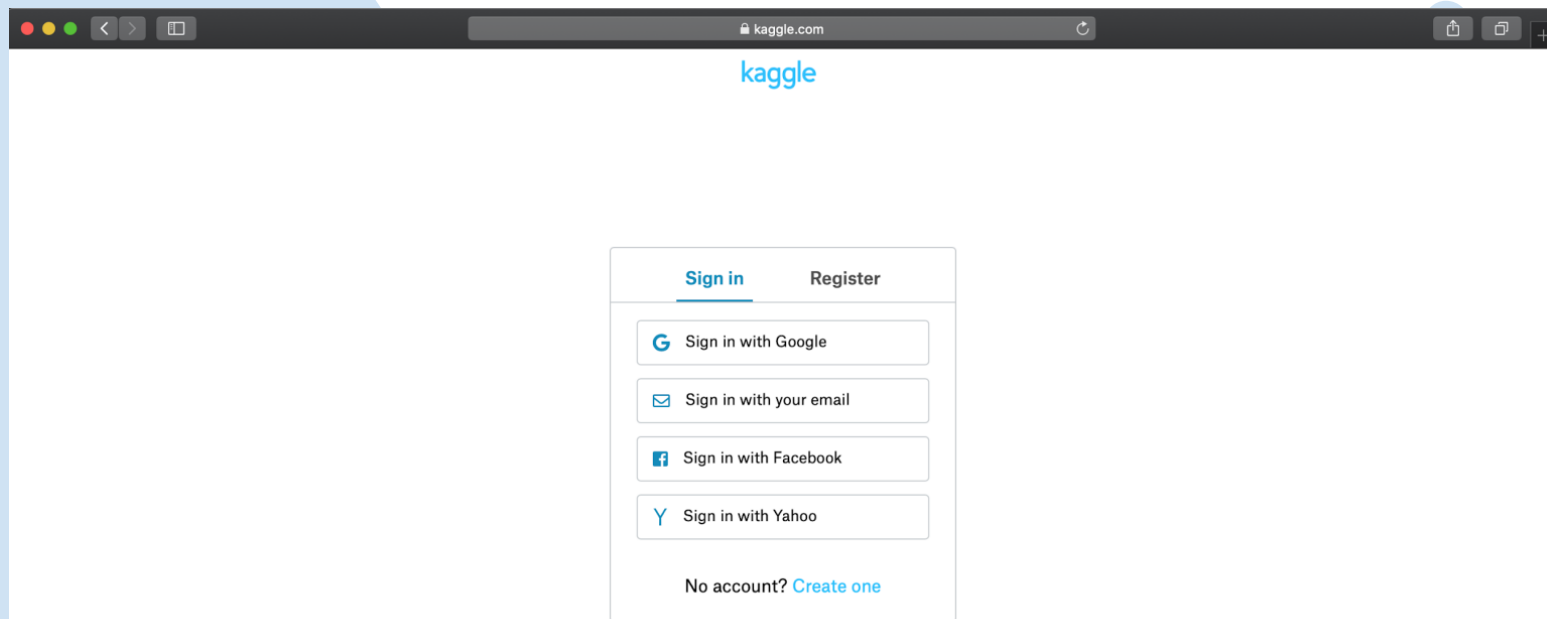
Website : <https://www.kaggle.com>

The screenshot displays the Kaggle website's 'Competitions' page. The top navigation bar includes the Kaggle logo, a search bar, and links to Competitions, Datasets, Notebooks, Discussion, and Courses. A 'Sign in' button and a 'Register' button are also present. Below the navigation bar, the 'Competitions' section is highlighted in blue. A 'Documentation' button and an 'InClass' button are visible. The main content area shows a list of 18 active competitions, sorted by 'Grouped'. The first four competitions are listed:

Competition	Prize	Teams
<b>Severstal: Steel Defect Detection</b> Can you detect and classify defects in steel? <i>Featured</i> · Kernels Competition · 2 months to go · manufacturing, image data	\$120,000	556 teams
<b>APTOS 2019 Blindness Detection</b> Detect diabetic retinopathy to stop blindness before it's too late <i>Featured</i> · Kernels Competition · 22 days to go · healthcare, medicine, image data, multiclass classifi...	\$50,000	2,434 teams
<b>SIIM-ACR Pneumothorax Segmentation</b> Identify Pneumothorax disease in chest x-rays <i>Featured</i> · 21 days to go · image data, object segmentation	\$30,000	1,378 teams
<b>Predicting Molecular Properties</b> Can you measure the magnetic interactions between a pair of atoms? <i>Featured</i> · 14 days to go · chemistry, tabular data, regression	\$30,000	2,502 teams

- ◆ 資料科學和機器學習競賽平台
- ◆ 目前已累積超過 50 萬名、遍布超過 194 個國家的註冊用戶
- ◆ 涵蓋電腦科學、電腦視覺、生物、醫藥
- ◆ 超過 9,000 個公開資料集
- ◆ 200,000 以上公開 notebooks


# Kaggle -- Sign In





A screenshot of a web browser displaying the Kaggle sign-in page. The browser's address bar shows 'kaggle.com'. The page features the Kaggle logo at the top center. Below the logo, there are two tabs: 'Sign in' (which is active and underlined) and 'Register'. Under the 'Sign in' tab, there are four buttons for different sign-in methods: 'Sign in with Google' (with a Google 'G' icon), 'Sign in with your email' (with an email icon), 'Sign in with Facebook' (with a Facebook 'f' icon), and 'Sign in with Yahoo' (with a Yahoo 'Y' icon). At the bottom of the sign-in section, there is a link that says 'No account? Create one'.


kaggle

Sign in Register

 Sign in with Google


 Sign in with your email

 Sign in with Facebook

 Sign in with Yahoo


No account? [Create one](#)

# Kaggle -- That's Start



## RLadies Taipei


Taiwan  
Joined 3 years ago · last seen in the past day






Competitions  
Novice

[Home](#) [Competitions \(1\)](#) [Kernels](#) [Discussion](#) [Datasets](#) [...](#) [Edit Profile](#)


### Competitions Novice






Unranked

0 0 0


### Kernels Novice






Unranked

0 0 0

### Discussion Novice



Unranked

0 0 0

# House Prices: Advanced Regression Techniques



## House Prices: Advanced Regression Techniques

Predict sales prices and practice feature engineering, RFs, and gradient boosting

4,360 teams · Ongoing

[Overview](#)[Data](#)[Kernels](#)[Discussion](#)[Leaderboard](#)[Rules](#)[Team](#)[My Submissions](#)[Submit Predictions](#)

Overview

Description

Evaluation

Tutorials

Frequently Asked Questions

### Start here if...

You have some experience with R or Python and machine learning basics. This is a perfect competition for data science students who have completed an online course in machine learning and are looking to expand their skill set before trying a featured competition.

### Competition Description



Ask a home buyer to describe their dream house, and they probably won't begin with the height of the basement ceiling or the proximity to an east-west railroad. But this playground competition's dataset proves that much more influences price negotiations than the number of bedrooms or a white-picket fence.

With 79 explanatory variables describing (almost) every aspect of residential homes in Ames, Iowa, this competition challenges you to predict the final price of each home.

## 預測房屋銷售價格

- ◆ Data
  - Train Data : 共 1,460 個房子
  - Test Data : 共 1,450 個房子
- ◆ 共 80 個 Feature

# House Prices -- 欄位介紹

- ◆ MSSubClass : 住宅類型
- ◆ MSZoning : 住宅區域 ; 房屋的落點區域
- ◆ LotFrontage : 前面街道長度
- ◆ LotArea : 前面街道面積
- ◆ Street : 街道路面 ; 街道路面材質
- ◆ Alley : 鄰近巷子 ; 巷子路面材質
- ◆ LotShape : 房屋形狀
- ◆ LandContour : 房屋地面平坦度 ; 平坦度分級
- ◆ Utilities : 水電瓦斯供應類型
- ◆ LotConfig : 地皮相對街道位置 ; 角落、中間、面路...
- ◆ LandSlop : 地面斜率 ; 斜率分級
- ◆ Neighborhood : 社區位置
- ◆ Condition1 : 鄰近區域 ; 房屋周邊的設施
- ◆ Condition2 : 鄰近區域 ; Condition1 補充
- ◆ BldgType : 內部房間類型
- ◆ HouseStyle : 內部住宅風格
- ◆ OverallQual : 材料與完成度評比 ; 評比等級
- ◆ OverallCond : 綜合狀況評比 ; 評比等級
- ◆ YearBuilt : 建造年分
- ◆ YearRemodAdd : 重建年分
- ◆ RoofStyle : 屋頂類型
- ◆ RoofMatl : 屋頂材料
- ◆ Exterior1st : 房屋外觀材質
- ◆ Exterior2nd : 房屋外觀材質
- ◆ MasVnrType : 紅磚類型
- ◆ MasVnrArea : 紅磚面積
- ◆ ExterQual : 房屋外觀材料品質
- ◆ ExterCond : 外觀材料目前狀況 ; 分級

# House Prices -- 欄位介紹

- ◆ Foundation : 地基類型
- ◆ BsmtQual : 地下室高度 ; 高度分級
- ◆ BsmtCond : 地下室評級
- ◆ BsmtExposure : 牆面狀況
- ◆ BsmtFinType1 : 地下室完工評比 1
- ◆ BsmtFinSF1 : Type 1 大小 ; 完工面積
- ◆ BsmtFinType2 : 地下室完工評比 2
- ◆ BsmtFinSF2 : Type 2 大小 ; 完工面積
- ◆ BsmtUnfSF : 地下室未完工大小 ; 面積
- ◆ TotalBsmtSF : 總地下室面積
- ◆ Heating : 屋內加熱方式
- ◆ HeatingQC : 加熱品質
- ◆ CentralAir : 中央空調 ; Yes / No
- ◆ Electrical : 電力系統
- ◆ 1stFlrSF : 1 樓面積
- ◆ 2ndFlrSF : 2 樓面積
- ◆ LowQualFinSF : 不良區域面積
- ◆ GrLivArea : 生活區域面積
- ◆ BsmtFullBath : 地下室廁所類型 ; 廁所間數
- ◆ BsmtHalfBath : 地下室廁所類型 ; 廁所間數
- ◆ FullBath : 廁所評級
- ◆ HalfBath : 廁所評級
- ◆ Bedroom : 臥室評級
- ◆ Kitchen : 廚房評級
- ◆ KitchenQual : 廚房品質
- ◆ TotRmsAbvGrd : 房間評比
- ◆ Functional : 房屋損毀狀況
- ◆ Fireplaces : 壁爐數量

# House Prices -- 欄位介紹

- ◆ FireplaceQu : 壁爐品質
- ◆ GarageType : 車庫位置
- ◆ GarageYrBlt : 車庫年分
- ◆ GarageFinish : 車庫內部完工程度
- ◆ GarageCars : 可放幾台車
- ◆ GarageArea : 車庫大小
- ◆ GarageCond : 車庫狀況
- ◆ GarageQual : 車庫品質
- ◆ PavedDrive : 車道材質
- ◆ WoodDeckSF : 木頭甲板區域
- ◆ OpenPorchSF : 門廊大小
- ◆ EnclosedPorch : 封閉門廊面積
- ◆ 3SsnPorch : 門廊面積
- ◆ ScreenPorch : 門廊面積
- ◆ PoolArea : 游泳池面積
- ◆ PoolQC : 泳池品質
- ◆ Fence : 圍籬品質
- ◆ MiscFeature : 其他特色
- ◆ MiscVal : 其他特色價值
- ◆ MoSold : 售出月份
- ◆ YrSold : 售出年分
- ◆ SaleType : 交易方式與類型
- ◆ SaleCondition : 房屋銷售類型



# Reference

## ◆ Github

- <https://github.com/AdamYuCheng/Machine-Learning/tree/master/Kaggle%20House%20Prediction>
- <https://github.com/Shitao/Kaggle-House-Prices-Advanced-Regression-Techniques>
- <https://github.com/nbrosson/HousePrediction>

## ◆ Kaggle Kernel

- <https://www.kaggle.com/xirudieyi/house-prices>