

# FDA Homework 2


Titanic in Kaggle

# What is Kaggle?

Kaggle is a platform that provides:

- (1) Real-world datasets for **machine learning**
- (2) Competitions with prizes (sometimes with money)
- (3) Discussion forum with a lots of code examples

# If you play Kaggle a lot ...



## bestfitting

Joined 7 years ago · last seen in the past day

Followers 13929

Competitions Grandmaster

[Home](#) [Competitions \(55\)](#) [Code \(2\)](#) [Discussion \(260\)](#) [Followers \(13,929\)](#) [Contact User](#) [Follow User](#)

### Competitions Grandmaster

Current Rank	Highest Rank
3 of 200,565	1

40	13	2
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- Human Protein Atlas - Si...  
2 years ago  
Top 1%  
1st of 757
- Human Protein Atlas Ima...  
4 years ago  
Top 1%  
1st of 2160
- Cdiscount's Image Classi...  
5 years ago  
Top 1%  
1st of 626

### Datasets Contributor

Unranked

0	0	0
---	---	---

No dataset results

### Notebooks Contributor

Unranked

1	1	0
---	---	---

- i96\_1e-4\_6e\_4\_bs32\_195  
4 years ago  
103 votes
- i96\_crop\_mode3\_dstep1...  
4 years ago  
32 votes

### Discussion Expert

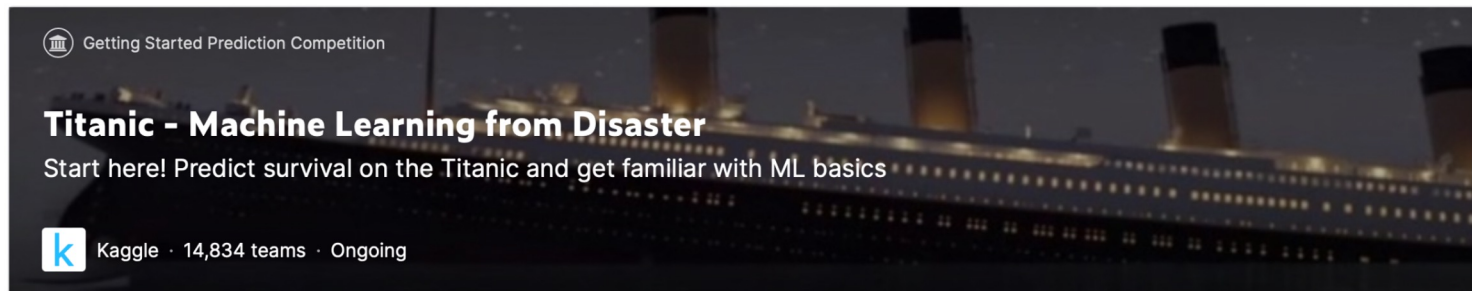
Current Rank	Highest Rank
337 of 332,995	23

16	16	132
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- A CNN classifier and a M...  
4 years ago  
619 votes
- My brief summary,a mai...  
5 years ago  
264 votes
- Fair Cell Activation Netw...  
2 years ago  
214 votes

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


# Homework 2: Titanic



Getting Started Prediction Competition

## Titanic - Machine Learning from Disaster


Start here! Predict survival on the Titanic and get familiar with ML basics

 Kaggle · 14,834 teams · Ongoing

[Overview](#) [Data](#) [Code](#) [Discussion](#) [Leaderboard](#) [Rules](#)

Join Competition ...

Overview

Description	 <b>Ahoy, welcome to Kaggle! You're in the right place.</b>
Evaluation	This is the legendary Titanic ML competition – the best, first challenge for you to dive into ML competitions and familiarize yourself with how the Kaggle platform works.
Frequently Asked Questions	<p>The competition is simple: use machine learning to create a model that predicts which passengers survived the Titanic shipwreck.</p> <p>Read on or watch the video below to explore more details. Once you're ready to start competing, click on the "Join Competition button" to create an account and gain access to the <a href="#">competition data</a>. Then check out <a href="#">Alexis Cook's Titanic Tutorial</a> that walks you through step by step how to make your first submission!</p>

<https://www.kaggle.com/c/titanic/>

# 作業內容

1. 本作業提供一個 `main.ipynb` 檔案，請於此檔案中進行修改
2. `main.ipynb` 檔案中已經一些執行範例，請進行完整的：
  - a. 資料分析與前處理
  - b. 模型訓練
  - c. 加分題：上傳至Kaggle進行評分 (需要先註冊Kaggle帳號)

# 繳交規則 (節錄)

1. 請將資料夾命名為 `FDA\_HW2\_你的學號` (壓縮後上傳moodle)
  - a. 例如 : FDA\_HW2\_F12345678
2. 請不要直接複製貼上別人的程式碼
3. 需要註明 :
  - a. 將安裝的套件與版本列於 requirements.txt
  - b. 計算資源 or 是否使用 Colab
  - c. 你所參考的 Kaggle notebook連結，以及任何參考連結
4. 需要充分解釋 :
  - a. 選擇特徵的理由以及所使用到的資料處理方法
  - b. 簡單解釋模型演算法
  - c. 模型超參數的選擇理由