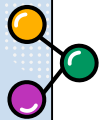




# Final Project

4/19 Content



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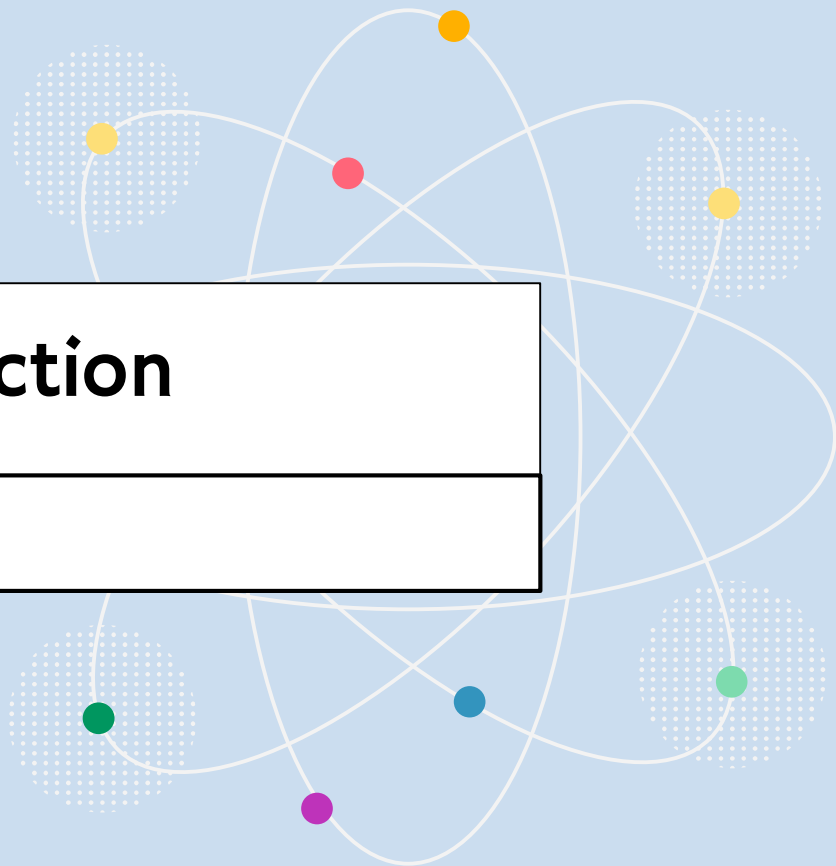
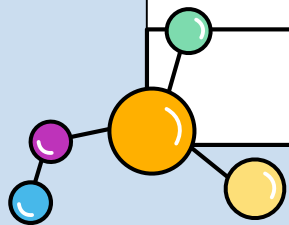
Preprocessing code

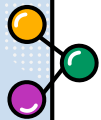
04

Deadline

01

# Introduction





# AI Cup 2022

進行中



### 肺腺癌病理切片影像之腫瘤氣道擴散偵測競賽 I：運用物體偵測作法於找尋STAS >

4/11/2022 開始 6/1/2022 結束

32.75 萬元(NTD) TOTAL REWARD

7 TEAMS

應用人工智慧分析數位病理影像是近年來新興且極具潛力的領域。透過分析腫瘤病理影像，可以取得豐富的腫瘤相關資訊，應用於臨床醫療。「腫瘤氣道擴散(spread through air spaces, STAS)」是近...  
(More)

距離比賽結束  
50 07 19 52  
天 時 分 秒

進行中



### 肺腺癌病理切片影像之腫瘤氣道擴散偵測競賽 II：運用影像分割作法於切割STAS 輪廓 >

4/11/2022 開始 6/1/2022 結束

32.75 萬元(NTD) TOTAL REWARD

8 TEAMS

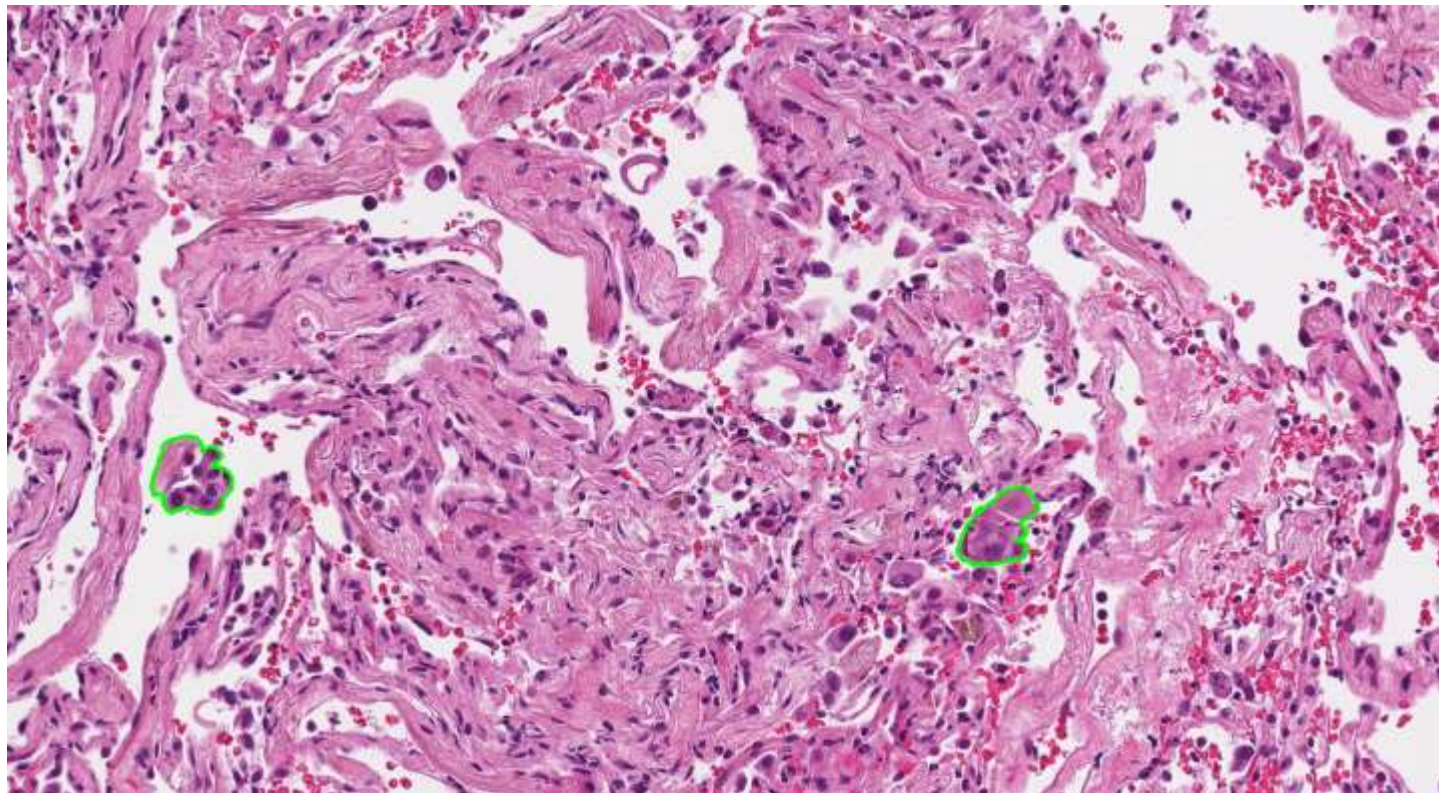
應用人工智慧分析數位病理影像是近年來新興且極具潛力的領域。透過分析腫瘤病理影像，可以取得豐富的腫瘤相關資訊，應用於臨床醫療。「腫瘤氣道擴散(spread through air spaces, STAS)」是近...  
(More)

距離比賽結束  
50 07 19 52  
天 時 分 秒

報名這個

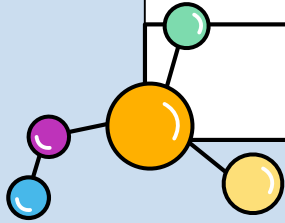


# 肺腺癌病理切影像之腫瘤氣道擴散偵測競賽



# 02

## Grading Policy





# Grading Policy

## 1. Leaderboard

Inference Dice Score and Best rank

## 2. Approaches

Please describe your approaches briefly, including network, parameters, layers, and techniques.

## 3. Group Info

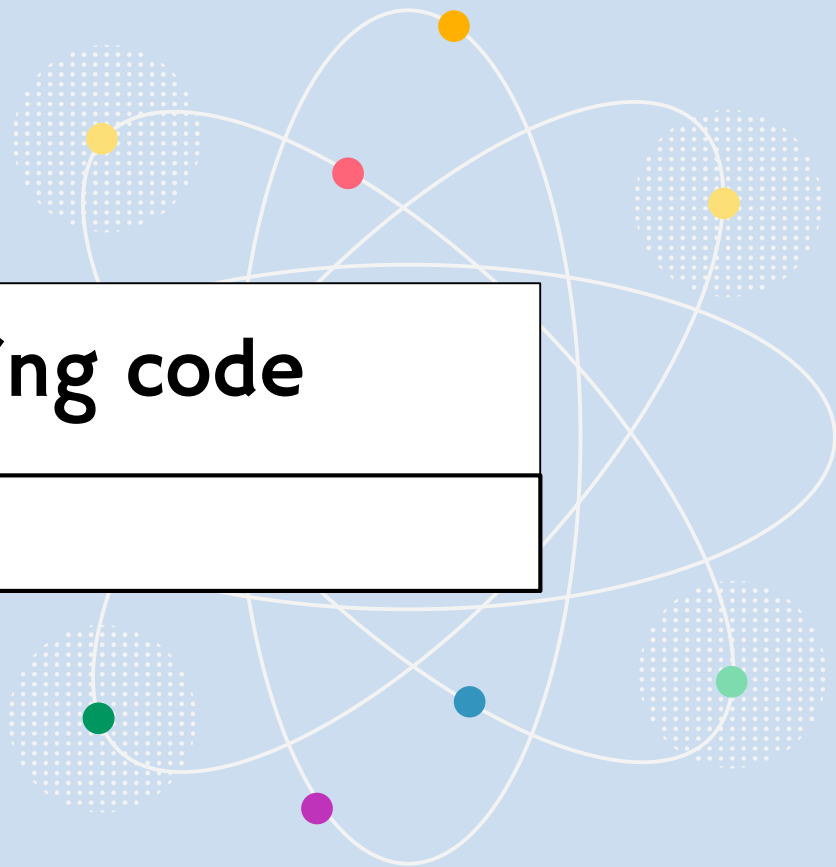
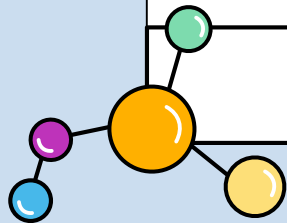
Team name, members and score.

## 4. Discussion or issue

If none, you can share your experience gained from this competition.

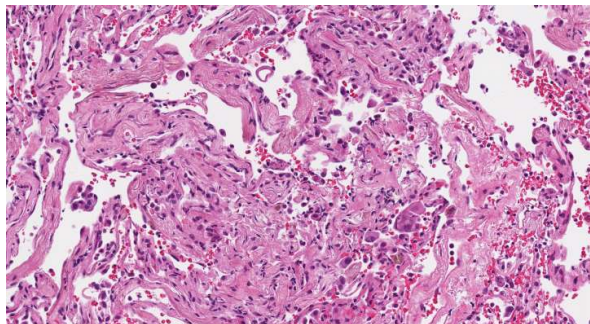
# 03

**Preprocessing code**





# Annotations to mask



Annotations

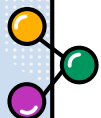


# Annotations to mask

```
import os
import json
import numpy as np
import cv2

dataset_root = './SEG_Train_Datasets'
anno_path = os.path.join(dataset_root, 'Train_Annotations')

mask_path = os.path.join(dataset_root, 'Train_Masks')
os.makedirs(os.path.join(dataset_root, 'Train_Masks'), exist_ok=True)
for jsonfile in os.listdir(anno_path):
    f = open(os.path.join(anno_path, jsonfile))
    data = json.load(f)
    mask = np.zeros((data['imageHeight'], data['imageWidth'], 1), dtype=np.uint8)
    for polygon in data['shapes']:
        pts = np.array(polygon['points'], dtype=np.int32)
        cv2.fillPoly(mask, [pts], color=255)
    save_mask_path = jsonfile.split('.')[0] + '.png'
    save_mask_path = os.path.join(mask_path, save_mask_path)
    cv2.imwrite(save_mask_path, mask)
```

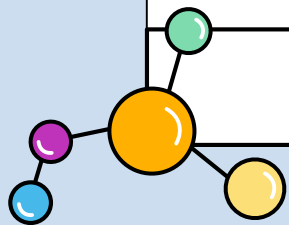


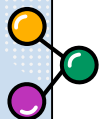
# Download

- ✚  [Final project] Preprocessing code 
- ✚  [Final project] Training dataset download 
- ✚  [Final project] 範例code 

# 04

**Deadline**





## Deadline

### Midterm

2022/05/03.Tue  
14:00



### HW3

2022/04/29.Fri  
23:59

### Competition Deadline

2022/06/01.Wed



### Final Project

2022/06/17.Fri  
23:59