



# 技術應用

1. Azure 雲端新聞處理平台
2. 動態影像辨識
3. OCR驗證碼識別
4. Healty U&Me Line Bot

技術應用

# AZURE 雲端新聞處理平台

## 專案簡介

面對當前大量且快速更新的新聞資訊，使用者常因英文閱讀不便或無法迅速理解內容而降低判斷效率。本專案旨在協助使用者快速處理新聞文本，提升閱讀效率與理解深度。系統提供翻譯、摘要與情緒分析等功能，協助使用者以更直觀的方式掌握新聞重點。

## 主要功能

- 新聞文本輸入與處理
- 中英文雙向翻譯
- 新聞摘要生成
- 情感分析（正向、負向、中性判斷）
- 內容重整與清空功能
- 處理結果語音朗讀

## 使用技術

- AZURE TEXT ANALYTICS
- AZURE SPEECH SERVICES
- AZURE TRANSLATOR
- AZURE CONTAINER INSTANCES
- AZURE CONTAINER REGISTRY

## 成果展示說明

展示圖片為平台的操作介面：

上方能輸入中文新聞內容，按下「翻譯成英文」後，下方會產生英文翻譯、情緒分析結果與摘要。同時可選擇重新整理內容或清除文本。



氣溫狂飆30℃！狗狗被主人關陽台 「熱到跳窗」從15樓墜下慘死

記者葉睿涵 / 編譯

俄羅斯莫斯科近來氣溫直飆攝氏30度，當地一隻德國牧羊犬疑因受困高溫炙熱的陽台、無人照料，將身體鑽出窗戶後，從15樓跳下喪命。事發時，鄰居目睹其痛苦哀鳴、絕望掙扎，並指控飼主長期虐狗，目前警方已介入調查。

當地媒體引述目擊者說法指出，事發當時，這隻被單獨留在陽台的狗不停哀號，試圖從炙熱的金屬欄桿中逃脫，甚至發出類似求救的叫聲，引發附近居民驚恐圍觀。有民眾緊急報警，但狗狗卻在把身體鑽出窗戶後，不慎墜樓身亡。拍攝到這一幕的居民稱，狗的絕望掙扎讓人難以忘懷。

牧羊犬的主人聲稱，她當日早上離家上班，將窗戶留開以便通風，家中無人，沒想到狗狗竟會墜樓慘死。然而，有鄰居指出，實際上2名飼主當時就在家裡附近飲酒作樂。與2人相識的熟人則透露，這對夫婦長期酗酒、精神狀態異常；其他鄰居也為2人家中另一隻狗的安全感到擔憂。

多位住戶證實，這對夫妻過去曾多次在醉酒狀態下毆打狗隻。一名鄰居回憶，有次女主人當街毆打愛犬，附近居民也曾多次向警方與動保團體舉報其虐待行為。此外，有畫面顯示，事發一個月前，狗狗被拴在商店外垃圾桶旁，獨自度過一整夜，直到隔天清晨才被帶回。

儘管面對大量證據與鄰居指控，牧羊犬的主人仍堅不認自負過失，堅稱狗狗可能是因為追逐鳥類而逃離陽台墜落。目前，由於警方已接獲多位住戶的聯名舉報，因此

翻成英文

翻譯

摘要

情感分析

重整



The temperature soared by 30°C! The dog was closed on the balcony by the owner, and it was so hot that he jumped out of the window and fell from the 15th floor and died

Reporter Ye Ruihan / Compiler

The temperature in Moscow, Russia, has soared to 30 degrees Celsius recently, and a local German shepherd dog is suspected of being trapped on a hot balcony and unattended, and jumped from the 15th floor after drilling his body out of the window. At the time of the incident, the neighbors witnessed the painful wails and desperate struggles, and accused the owner of abusing the dog for a long time, and the police have now intervened in the investigation.

Local media quoted eyewitnesses as saying that at the time of the incident, the dog, which was left alone on the balcony, kept wailing, trying to escape from the hot metal railing, and even made a cry similar to crying for help, causing nearby residents to watch in horror. Some people called the police urgently, but the dog accidentally fell to his death after drilling his body out of the window. Residents who filmed the scene said the dog's desperate struggle was unforgettable.

The owner of the shepherd dog claimed that she left home for work that morning, leaving the window open for ventilation, and that there was no one at home, so she did not expect the dog to fall from the building and die tragically. However, a neighbour pointed out that in fact, the two owners were drinking and having fun near their home at the time. An acquaintance who knew the two revealed that the couple had been drinking heavily for a long time and had an abnormal mental state; Other neighbors were also concerned about the safety of the other dog in the 2 family's home.

Multiple residents confirmed that the couple had beaten the dog in a drunken state on several occasions in the past. A neighbor recalled that the hostess once beat her dog in the street, and that nearby residents had repeatedly reported her abuse to the police and animal protection groups. In addition, there is a picture showing that a month before the incident, the dog was chained to a garbage can outside the store and spent the whole night alone, and was not brought back until the next morning.

Despite overwhelming evidence and accusations from neighbors, the owner of the collie denied his fault, insisting that the dog may have fallen from the balcony by mistake while chasing birds. At present, as the police have received a joint report from a number of residents, the authorities have intervened and launched an investigation into whether the case involves animal cruelty. The local community is calling for the protection of the remaining animals that are still in the families concerned as soon as possible to prevent a recurrence of the tragedy.





# 技術應用

# 影像辨識

## 專案簡介

本專案以 OPENCV 建立臉部與表情辨識模型，能針對靜態圖片與即時攝影機畫面進行辨識。系統可精準框出人臉、眼睛等特徵位置，並能即時偵測使用者的表情狀態。

## 主要功能

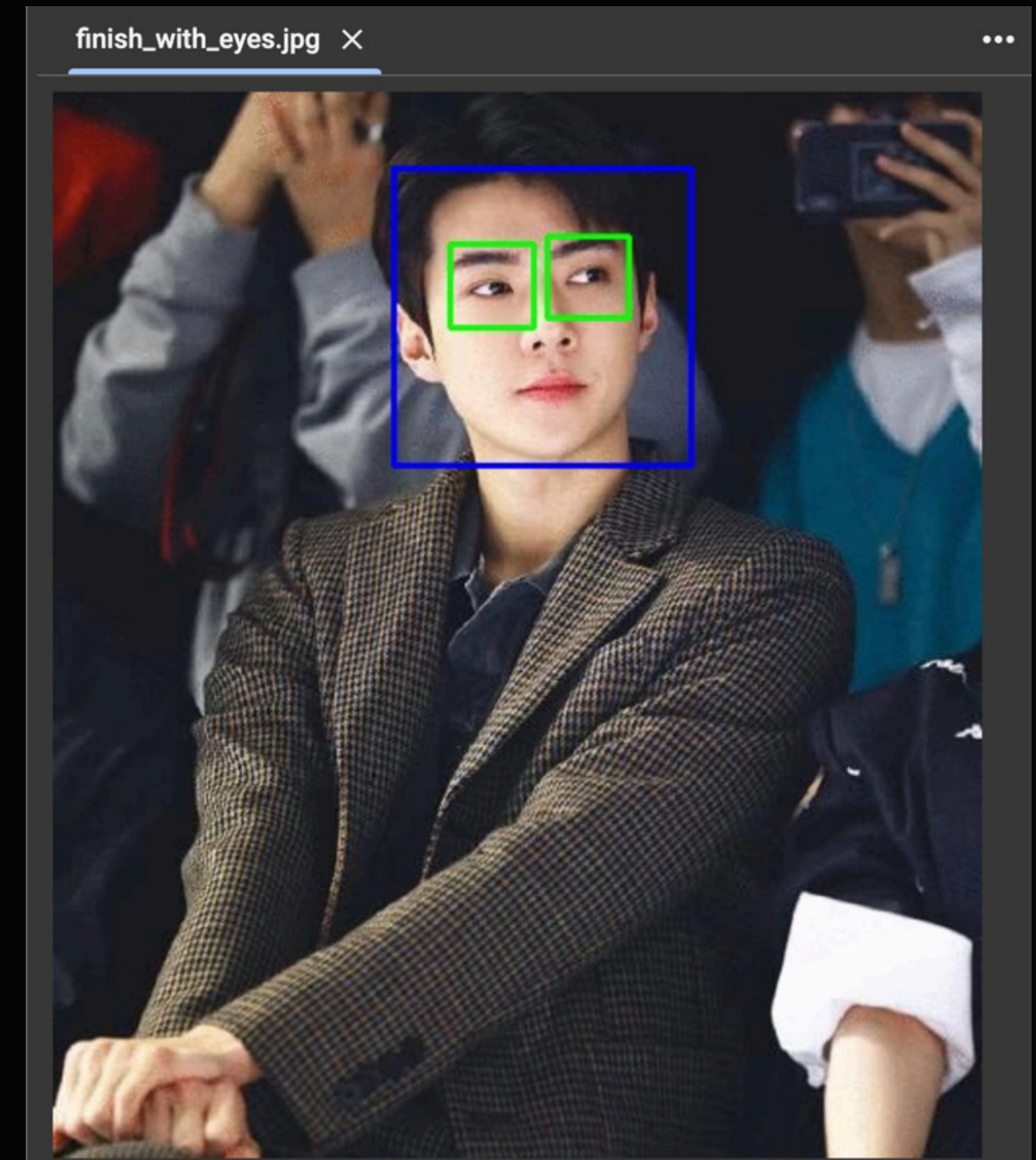
- 靜態影像人物臉部框選
- 眼睛等臉部特徵辨識
- 即時影像（攝影機）臉部偵測
- 基礎情緒或表情偵測

## 使用技術

- PYTHON
- OPENCV (CV2)
- HAAR CASCADE 模型
  - HAARCASCADE\_FRONTALFACE\_DEFAULT
  - HAARCASCADE\_EYE
  - HAARCASCADE\_SMILE

## 成果展示說明

展示圖片中，系統以藍色方框準確框出人物臉部，並以淺綠色方框框出雙眼位置。在動態影像辨識部分，系統能於使用者開啟鏡頭時即時完成臉部偵測與表情分析。



技術應用

# OCR驗證碼識別

## 專案簡介

本專案利用影像前處理與 OCR 技術完成驗證碼的自動辨識。系統透過二值化、門檻處理提升影像品質，並成功將圖片中的數字轉換為可讀取的文字輸出。

### 主要功能

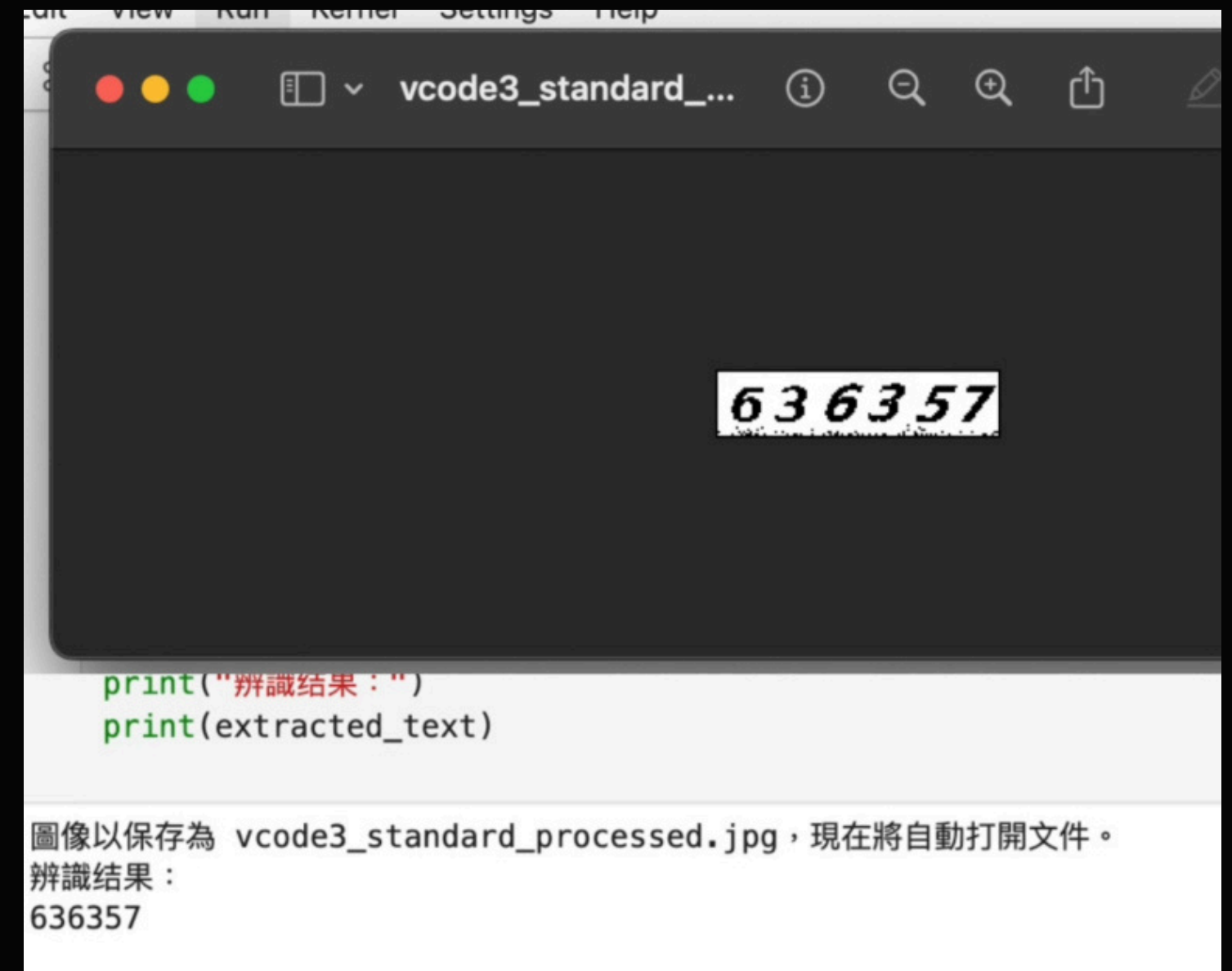
- 驗證碼圖像讀取
- 灰階與二值化處理
- 自動 OTSU 門檻化
- 處理後影像視覺化呈現
- 辨識數字輸出

### 使用技術

- PYTHON
- OPENCV
- MATPLOTLIB
- TESSERACT  
OCR

## 成果展示說明

展示圖片包含原始驗證碼圖片與系統辨識出的結果。辨識輸出顯示為數字字串，與原圖內容一致，代表 OCR 流程成功辨識圖片內容。





## 技術應用

# HEALTHY U&ME LINE BOT

### 專案簡介

本專案以 LINE 對話介面打造個人化健康管理工具，整合日常飲食記錄、健康數據輸入、食譜推薦與外食建議等功能。使用者以自然對話方式即可完成健康資訊的蒐集與查詢，提升健康管理的便利性與持續性。

### 主要功能

- 我的身體健康：輸入身高、體重、血壓、血糖等基本健康數據
- 飲食追蹤器：以對話方式回報每餐攝取卡路里並紀錄
- 健康食譜推薦：依照使用者需求提供健康料理建議
- 健康外食GO：利用地圖搜尋推薦附近健康餐點
- 健康知識王：提供互動式健康知識問答
- 健康數據圖：自動生成身高體重與血壓血糖的折線圖，協助追蹤趨勢

### 使用技術

- LINEBOT API、WEBHOOK
- PYTHON
- GOOGLE MAP SEARCH
- RANDOM CHOICE

### 成果展示說明

展示圖片介面採六宮格選單設計，使用者可在 LINE 中直接點選功能、查看健康圖表、接收食譜推薦與外食地圖連結，完整呈現可日常使用的健康管理互動體驗。

