

## 十大創料少年





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去年我研發了Elder-AID,透過人工智能偵測護老院閉路電視片段裡是否出現疑似虐長之情況。研發過程中雖困難重重,但我仍然堅持下去,做出成功的發明。每個人都有自己專長,若我們願意有所付出來幫助別人,世界會變得更美好。希望我能繼續用自己對STEAM的熱誠貢獻社會。

Last year, I invented Elder-AID, an AI system that detects physical abuse in CCTV footage in elderly nursing homes. With development taking over half a year, I experienced a roller coaster of emotions, but my determination created a successful solution. I realised that every person has their own strengths, and our world would be a better place if we utilised them to help others. Moving forward, I hope to continue to use my passion for STEAM to make a difference in society make a difference in society and influence others to do so as well, one invention at a time.

## Elder-AID

對長者身體施虐一直是香港護老院需要面對的問題。現在靠人手檢查閉路電視片段除了浪費人力,檢查人員亦可能正是施虐者,令此方法不可靠。Elder-AID 使用人工智能分析閉路電視片段,偵測疑似對長者身體施虐之行為,並通知老人中心管理層儘快跟進。它使用 LRCN 影片分析架構,採用暴力和非暴力兩組訓練數據,用 Google Colab 和 Python 編寫。Elder-AID 能有效減少虐老的情況出現,讓長者安享晚年。

Elderly abuse has always been a problem in Hong Kong's elderly nursing homes. The current solution of manually monitoring CCTV footage of abuse may be unreliable: it wastes lots of manpower and time, and the person-in-charge of checking could be the abuser themselves. Therefore, Elder-AID was invented to detect suspected physical abuse in given footage using artificial intelligence with the Long-term Recurrent Convolutional Network (LRCN) architecture. Trained with data from two classes Violence and Non-violence from a Kaggle dataset and coded with Python and Google Colab, the platform alerts the superintendent of the nursing home's organisation to intervene as soon as possible. It is hoped that Elder-AID can reduce the number of elderly abuse cases and let them enjoy a peaceful retirement life.