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# 不讓危險『們』進來！

近年來，校園安全事件頻繁發生，如惡男入侵挾持童事件、北投割喉案，以及德望學校疑似出現偷拍狂事件、大叔穿黃衣黑裙制服戴假髮闖景美女中 嚇壞女學生。

本組專題致力於研究如何利用AIOT智慧物聯網技術來提高校園安全，防止類似事件再次發生，成為一個迫切且具有社會意義的研究課題。



AMB82 mini開發板：可以連接LED、開關、壓力計、濕度計、PM2.5粉塵傳感器等電子元器件。收集到的數據可以通過WiFi上傳，提供應用程式使用，實現物聯網應用。



利用YOLO=You Only Look Once的特性，演算判斷此人動作是否鬼鬼祟祟，找出潛藏在校園內外的可疑人士之外，同時補強校園死角治安。



利用YOLO V8偵測對象，被偵測到的對象會被方框標記，並判斷該對象可能為甚麼物品，並以此進行判斷及反應。



獲得雲林科技大學全國專題比賽佳作

114307 JAMES

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# Don't let dangers come in!

In recent years, there has been a frequent occurrence of campus security incidents, such as incidents involving intruders kidnapping children, the Beitou throat-slashing case, and suspected voyeurism incidents at the Dewei School, as well as instances of individuals frightening female students by dressing inappropriately and intruding into female campuses. Our team project is dedicated to researching how to utilize AIOT (Artificial Intelligence of Things) technology to enhance campus security, prevent similar incidents from happening again, and address this pressing and socially significant research topic.



The AMB82 mini development board can be connected to various electronic components such as LEDs, switches, pressure sensors, humidity sensors, and PM2.5 dust sensors. The collected data can be uploaded via WiFi for use by applications, enabling the realization of IoT applications.



Using the characteristics of YOLO (You Only Look Once), algorithmically determine whether an individual's actions are suspicious, identify suspicious individuals lurking both inside and outside the campus, and simultaneously reinforce surveillance blind spots on campus to enhance security.



Using YOLO V8 for object detection, detected objects will be labeled with bounding boxes, and their potential identity will be determined. This information can then be used for further analysis and response.



Won the Excellent Work in Yunliang University of Science and Technology's National Special Competition.