

Hong Kong Student Science Project Competition 2023
Template of Extended Abstract (Invention)

Team Number: JAPE200
Project Title: Mask Up
Project Type: Invention

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The COVID-19 pandemic in Hong Kong saw the implementation of a mask mandate in July 2020 to control the spread of the virus. Even though the mandate was lifted in March 2023, some places still require mask-wearing, including hospitals and nursing homes. To help comply with the mask mandate, a product has been designed to remind people, particularly the elderly, to wear masks when leaving their homes. The product features a microchip circuit, camera modules, a buzzer, and a battery, and can detect whether a person is wearing a mask or not through AI technology. If a person is not wearing a mask, the device will sound an alarm to remind them, and the sound can be customized. The product is low-cost, lightweight, easy to install, and can be modified for use in hospitals or clinics.

二零二三年香港學生科學比賽
延伸摘要範本 (發明品)

隊伍號碼：JAPE20

作品名稱：戴上口罩

參賽類別：發明品

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由於 COVID-19 的大流行，香港於 2020 年 7 月實施了口罩令，以控制病毒的傳播。儘管該令在 2023 年 3 月被取消，但一些地方仍需要戴口罩，包括醫院和護理院。為了幫助遵守口罩令，設計了一種產品，提醒人們，尤其是老年人，在離開家時佩戴口罩。該產品具有微芯片電路、攝像頭模塊、蜂鳴器和電池，並通過人工智能技術檢測人是否佩戴口罩。如果一個人沒有戴口罩，該設備將發出警報提醒他們而發出的提示聲音亦可以由使用者自定。成本低、重量輕、安裝簡單，均為這個發明品的優點，並可通過修改用於醫院、診所及其他場所。