

②1 参賽團隊大合照 Photo of all participating teams

馬來西亞奧賽特國際無人機嘉年華 資通系學生勇奪金牌

龔志銘|資訊科技與通訊學系教授

資通系團隊雙金 為校爭光

實踐大學高雄校區資訊科技與通訊學系(以下簡稱資通系) 龔志銘教授率領無人機團隊,成員包括陳柏文、馮裕宸、盧宏華、鄭至倫、江家順、連晨宇、劉柏劭、李啟睿及梁建宇 9 名學生,參加 **2024 年馬來** 西亞奧賽特 AI 機器人與無人機國際競賽。團隊成員在賽前投入長達半年的密集訓練,學習項目含無人機操作技術、AI 應用開發及無人機足球戰術模擬演練等,並以團隊合作精神克服多次技術難題,例如改進飛行穩定性及提升 AI 判斷效率,為參賽奠定堅實的基礎。

該賽事於 113 年 12 月 7 至 8 日在馬來西亞柔佛州新山市舉行,由臺灣奧賽特國際展會有限公司 (UASACT) 與馬來西亞人工智能協會 (MyAIRA) 聯合主辦,旨在推廣人工智慧、機器人及無人機教育,並促進跨國科技交流與合作。賽事吸引來自臺灣、美國、中國、馬來西亞、新加坡等地 120 支隊伍參賽,各隊須通過區域初賽,才能晉級國際決賽,充分展現競爭激烈程度與活動國際化規模。

在臺灣區域賽中,實踐大學團隊以2金2銀 1銅佳績,取得代表臺灣參加馬來西亞跨國決賽的 資格。該區域賽包含無人機足球競技、AI無人機 創新設計競賽等多項挑戰項目,全面考驗參賽者 的技術能力與創意表現。在國際決賽中,實踐團 隊再接再厲,成功奪得無人機足球競賽高階組1 金1銀、無人載具 AI 創新應用競賽1金1銅的優 異成績,為校爭光。

實踐團隊在無人機足球競賽高階組的比賽中,展現卓越技術與團隊合作精神。無人機足球是一項新興的無人機競技運動,兩隊各自以3架裝有保護紗的無人機進行比賽,其中1架作為攻擊機,試圖穿越對方球門得分,其餘2架則為責任防守。該項目考驗選手對無人機的操控能力、戰術策略及臨場反應。實踐團隊在比賽中沉著應對,最終奪得金牌。

在無人載具 AI 創新應用競賽中,團隊成員運用人工智能技術,設計創新的無人機應用方案。該項競賽旨在鼓勵參賽者組合 AI 技術,設計無人機在不同領域的創新應用,以提升無人機智能化水準。實踐團隊的作品獲得評審高度評價,並榮獲金牌。

02 資通系選手為馬來西亞學生說明無人機足球競賽 A DITC student taking part in the contest explained to the students in Malaysia how the drone football match works.



擴展與國際接軌 跨域交流

本校資通系致力培養學生在資訊科技與通訊 領域之專業能力,積極參與各類國內外競賽,以提 升學生的實作經驗與競爭力。此次參賽,充分展現 本校在無人機技術與人工智能領域的實力,以及對 創新教育的重視。為提供學生專業設備與實際操作 機會,本校特別成立無人機實驗室,同時安排業界 專家定期辦理工作坊,以協助學生瞭解最新技術趨 勢。本次無人機團隊能取得佳績,實歸功於學校的 支持與學生的努力。

現今無人機技術發展日新月異,可預期未來 能在各行各業發揮更大的效用,本校亦將持續鼓 勵師生投入無人機相關創新研究,並支持學生參與 各類國際競賽,以培養更多優秀人才,為科技發展 與社會進步盡一份心力。為此,本校規劃進一步擴 展無人機實驗室規模,新增更先進的設備及測試場 地,以增進學生的實務經驗。同時,將與國際知 名學府及企業攜手合作,設立聯合研究項目與學 生實習計畫,以促進跨領域的學術交流及創新發 展。此外,本校亦規劃開設無人機與 AI 應用相關 新課程,確保學生於快速變化的科技環境中與時俱 進,並不斷提升就業競爭力。■





資通系學生於 AI 無人機競賽中為馬來西亞民眾進行解說 A DITC student taking part in the AI drone contest explained how the drones work to the visiting public in Malaysia.

DITC Students Win Gold Medals at UASACT International AI Robot & Drones Carnival Competition in Malaysia

Kung Chih-Ming (龔志銘) Professor in the Department of Information Technology & Communication

DITC team brings home two gold medals

Professor Kung Chih-Ming of the Department of Information Technology & Communication (DITC) (Kaohsiung Campus) recently led a team to take part in the **2024 UASACT International AI Robot & Drones Carnival Competition in Malaysia**. The nine students on the team were Chen Po-Wen (陳柏文), Feng Yu-Cheng (馮裕宸), Lu Hong-Hua (盧宏華), Cheng Chih-Lun (鄭至倫), Chiang Chia-Shun (江家順), Lien Chen-Yu (連晨宇), Liu Po-Shao (劉柏劭), Lee Chi-Ruei (李啟睿) and Liang Chien-Yu (梁建宇). Ahead of the competition, the team spent six months in intensive training, learning everything about drone operation, development of AI applications, drone football tactical drills and so on. The team worked together to overcome numerous technical issues, including improving drone flight stability and AI decision-making efficiency.

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Jointly hosted by Taiwan's UASACT and Malaysia's MyAIRA, the competition was held in Johor Bahru, State of Johor, Malaysia to promote AI, robots and drone education, as well as boosting international exchange and collaboration in technology. A total of 120 teams from Taiwan, the U.S., China, Malaysia and Singapore participated in the regional preliminary competitions to qualify for the final international competition. It was a fierce competition with outstanding contenders from different countries.

In the regional competition in Taiwan, the team from Shih Chien University (SC) won a total of two gold medals, two silver medals and a bronze medal, winning the ticket to represent Taiwan to enter the final competition in Malaysia. Competition categories included drone football, innovative AI drone design and many more, covering comprehensive aspects to test competitors' skills and creativity. In the international final competition, the SC team continued their brilliant performance to win a gold and a silver in the drone

football match and a gold and a bronze in the innovative AI drone application contest.

The SC team demonstrated outstanding skills and teamwork in the advanced category of the drone football match. Drone football is an emerging sport that uses drones. Both teams have three drones encased in protective cages, with one engaging in attacking actions to score a goal while the other two work as defenders. The contender's ability to operate the drone, tactical strategies and quick reaction were key factors to look for. The SC team stayed calm and composed in the game and eventually won the gold medal.

In the innovative AI drone application contest, the team leveraged AI to design an innovative drone application. The aim of the contest was to encourage contenders to use AI to design innovative drone applications in various areas to make drones smarter. The work of the SC team was highly praised by the judging panel and won the gold medal.

05 龔志銘教授擔任無人機足球論壇演講者 Professor Kung Chih-Ming spoke at the drone fooball forum. 馬來西亞州議員觀看無人機足球 A member of the parliament in Malaysia watched the drone football match.





Cross-disciplinary exchanges at a global level

The Department of Information Technology & Communication is dedicated to enhancing students' professional skills in information technology and communication. Students are encouraged to take part in competitions at home and abroad to gain more experience and have a better competitive edge. The achievements at the UASACT competition demonstrate not only our ability in drone technology and AI but also our emphasis on innovation in education. To provide professional equipment and hands-on experience, SC has established a drone lab and regularly organized workshops taught by industry experts to keep students abreast of the latest trends and developments. The support from the university and the hard work of students led to the achievements of the drone team.

With drone technology advancing fast, it is expected that drones will have more applications in all kinds of areas in the future. We will continue to encourage the teaching staff and students to devote themselves to drone related innovative research, and support students to participate in international competitions. We hope to nurture more talent for the development of technology and a better society. Therefore, SC plans to expand the scale of the drone lab by adding more advanced equipment and testing venues to provide more hands-on experience for students. Meanwhile, we will join hands with companies and famous universities abroad to set up joint research programs and internships to boost crossdisciplinary academic exchanges and innovation. Moreover, we plan to provide new courses on drones and Al applications to enhance students' employability in a fast-changing world.

資通系學生於馬來西亞獲獎合影 DITC students won top prizes in the competition in Malaysia.



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