

陽明交大與奧圖碼 AI 暨 虛實互動研發中心啟用

國立陽明交通大學與奧圖碼聯手共同成立「AI 暨虛實互動研發中心」，於 4 月 20 日正式啟用。由陽明交大資工系與奧圖碼研究團隊，共同在人工智能時代，研發人類與機器設備互動的技術方案，打造更多創新應用情境。

國立陽明交通大學林奇宏校長表示，在人工智能時代，人類與機器設備的互動經歷革命性的變化。對於教育產業，特別是高等教育而言，AI 與虛實互動的教育方案能讓學習更有趣，提升學習效率，培養學生自主學習能力，也能減輕教學端教學負擔，將重心放在實施創新教學及前瞻研究。特別是過去兩年新冠疫情爆發後，全球的校園學習環境經歷了停課不停學、虛擬與實體混合授課的現實挑戰，更加速了對於數位轉型和虛實互動的技術需求。陽明交大與奧圖碼「AI 暨虛實互動研發中心」的成立，不僅將學術界的研究落實在產業界的應用情境中，更能培育台灣 AI 科技人才與國際接軌。

奧圖碼陳士元董事長表示：「奧圖碼身為大型顯示方案領導品牌，多年來致力於顯示科技的互動體驗，隨著 AI 時代全面啟動，徹底改變人機互動與設計創作的模式，產業與學術界唯有不斷創新、跨業整合方能在一日千里的 AI 環境中永續共榮；有鑑於此，我們與國立陽明交通大學資訊工程學系展開產學合作，成立『奧圖碼 AI 暨虛實互動技術研發中心』。希望能結合奧圖碼與陽明交通大學對於 AI、虛實互動感知技術的研發能量，並透過研發中心內『未來教室』的應用佈建，激發更多的想像與研究探索，將開發成果和實際產業需求結合，也期待培育更多人才投入 AI 及虛實互動領域，共同推動台灣產業的進步。」



陽明交大與奧圖碼 AI 暨虛實互動研發中心啟用儀式。左：陽明交大林奇宏校長，右：奧圖碼陳士元董事長

陽明交大與奧圖碼過去已有緊密的合作關係，此次進一步透過「AI 暨虛實互動技術研發中心」的啟用，與資工系陳冠文教授及詹立章教授以「未來教室的感知偵測」，以及「混合遠端協作與虛擬互動技術」為題，展開為期兩年的研究計畫，共同深入 AI 交互應用以及虛實互動遠近協作技術。

身為陽明交大傑出校友的奧圖碼陳士元董事長，為奧圖碼創始元老，奧圖碼自 2002 年成立以來，第一時間進行全球布局，並在影像解決方案領域成為業界翹楚，服務遍及五大洲 150 多個國家，深耕教育、企業、家用、娛樂展演各種專業領域的應用，並獲得多項國際產品設計大獎。本著企業 CSR 回饋社會的精神，奧圖碼多年來與大專院校合作，投入沉浸式教育的推廣與研發，除了「陽明交大與奧圖碼 AI 暨虛實互動技術研發中心」，也共襄盛舉參與陽明交大台灣電腦資訊發展館 - 全台首座電腦博物館的興建，提供串接互動式雷射投影設備，並捐贈互動式未來教室 86 吋互動式多點觸控螢幕以及智能教學解決方案，助於提升課堂學習專注度，讓師生在高效互動中激發更多創意和靈感，除此之外，以互動式觸控螢幕取代傳統黑板，打造無灰塵、無汙染空氣清新的教學環境。



感謝奧圖碼捐贈研究中心研究用設備，陽明交大林奇宏校長(左二)代表致贈感謝函，由奧圖碼陳士元董事長(右二)代表接受



圖為陽明交大與奧圖碼研究團隊合影

NYCU and Optoma Launches an AI and Virtual Reality Research and Design Center

National Yang-Ming Chiao Tung University (hereinafter referred to as NYCU) and Optoma Corporation (hereinafter referred to as Optoma) have partnered to establish the 'AI and Virtual Reality Research and Design Center' which officially launched on April 20th, 2023. The talents from both the Department of Computer Science at NYCU and Optoma's research team have developed technological solutions that foster human-machine interaction in the era of artificial intelligence, leading to the emergence of diverse innovative application scenarios.

President Chi-Hung Lin of NYCU stated the interaction between humans and machine devices has undergone a revolutionary transformation in the era of artificial intelligence. For the education industry, especially in higher education, interactive AI and virtual reality solutions can make learning more engaging, enhance learning efficiency, nurture students' abilities for self-directed learning, while reducing the teaching burden and enabling instructors to concentrate on innovative teaching approaches and forward-looking research.

In the two years following the outbreak of the COVID-19 pandemic, the global educational landscape has faced challenges, including the 'study must not stop' policy, which has led to a fusion of virtual and in-person instruction. As a result, there has been an increasing demand for digital transformation and technologies that facilitate virtual reality interactions. The establishment of the 'NYCU-Optoma AI and Virtual Reality Research and Design Center' not only translates academic research into practical industrial applications but also nurtures Taiwan's AI technology talent to align with the global community.

Chairman Shi-Yuan Chen from Optoma expressed, "Being a prominent player in the field of large-scale display solutions, Optoma has remained dedicated to enhancing interactive experiences in display technology over the years. As the AI era unfolds fully, it has fundamentally reshaped the paradigm of human-machine interaction and design creation. Embracing continuous innovation and promoting collaboration across diverse sectors is crucial for ensuring the sustainable prosperity of both the industry and academia within the rapidly evolving AI landscape. Therefore, we have initiated an industry-academic partnership with the Department of Computer Science at NYCU, establishing the 'Optoma AI and Virtual Reality Research and Design Center.' I hope to bring together the research capabilities of Optoma and NYCU in advancing AI and virtual-reality interactive sensing technologies. By deploying the 'Future

Classroom' within our research center, we aim to ignite greater creativity and research exploration to integrate our development achievements with real-world industry requirements. Meanwhile, we eagerly anticipate nurturing more talent within the AI and virtual-reality interactive sectors, jointly driving the advancement of Taiwan's industries."

NYCU and Optoma have a history of close collaboration. With the recent establishment of the 'AI and Virtual Reality Research and Design Center,' they are now gearing up for a two-year research project in partnership with Professors Kuan-Wen Chen and Liwei Chan from the Department of Computer Science. This research initiative will center around 'Sensory Detection for Future Classrooms' and 'Hybrid Remote Collaboration and Virtual Interaction Technology,' aiming to deepen their exploration of AI interactive applications and virtual-reality collaboration technology.

Chairman Shi-Yuan Chen, an outstanding alumnus of NYCU, is one of the founding pioneers of Optoma. Since its establishment in 2002, Optoma has rapidly expanded its global presence and has become a leading player in the field of image solutions. Its services reach over 150 countries across five continents, providing specialized solutions for education, corporate, residential, entertainment, and exhibition purposes. Consequently, Optoma has also received numerous international product design awards.

Following the principles of corporate social responsibility (CSR) aimed at contributing to society, Optoma has established longstanding partnerships with universities, focusing on advancing and exploring immersive education. In addition to establishing the 'NYCU-Optoma AI and Virtual Reality Research and Design Center,' Optoma has actively participated in the construction of the inaugural Beyond Computing Museum at NYCU, Taiwan's first computer museum, and provided comprehensive integrated laser projection equipment. Optoma has also generously donated an 86-inch interactive multi-touch screen and intelligent educational solutions for future interactive classrooms. This initiative is designed to enhance concentration within the classroom, facilitating creativity and inspiration among both instructors and students through efficient interaction. Furthermore, by replacing traditional chalkboards with interactive touch screens, they aim to create an instructional environment free from dust and enriched with fresh, unpolluted air.