以 AI 領 航 國 際

隨著半導體產業與 AI 熱潮的延燒，本院新的一年也有許多相關的精彩表現，除了畢業校友們在產業上的傑出成績，院內師生們的表現也不遑多讓，而近 70 位、全國最多的堅強師資，也使得本院今年研究所招生受到學子們的青睞，報考率持續攀升。此外，美國名校耶魯大學二十多位師生在今年三月份參訪台灣的代表團，也在 3 月 15 日特別蒞臨陽明交通大學，與本院師生就人工智慧等相關議題進行深度且具有洞察力的討論，並展開後續相關合作與夥伴關係建立。期待在校友、師生以及與優秀國際人才交互相長學習之下，本院能為社會培育更多優秀人才，替台灣在國際產業市場上，繼續保持領先位置。

今年上半年，在陽明交大舉行了兩場榮譽博士頒授典禮，除了電子工程學系畢業的校友 - 台積電總裁魏哲家之外，本院校友 - 緯創董事長林憲銘便因提早佈局 AI 與相關應用產業之投資與研發，不但帶領緯創創下總市值超過新台幣 8,000 億元的成績，更讓台灣在國際 AI 產業鏈上，擁有舉足輕重的地位。此外，本院今年也有兩位校友獲得陽明交大第三屆傑出校友：奧圖碼科技董事長陳士元和羅昇企業獨立董事、北祥科技董事長李良猷。陳士元為中強光電的創始成員之一，後來奧圖碼獨立為中光電集團品牌，在陳士元帶領下，成為全球數位投影及影像解決方案領導品牌，服務遍及全球 150 多個國家。而 1982 年創立中華民國資訊經理人協會的李良猷，則是在推廣企業資訊交流應用和數位轉型做出重大貢獻，近年成為經管著作等顧問、作家與導師，輔導企業建置 AI 大數據智慧應用系統。

校友之外，本院年輕教授的表現也十分突出！恭喜本院邱維辰教授，榮獲中央研究院 2023 年「年輕學者研究成果獎」。而本院顏安孜博士，則獲得 ACLCLP（計算語言學協會 - 中文處理）博士論文獎的榮譽提名。至於曾新穆教授團隊在智慧醫療領域所開發的「多目標時間序列早期預測技術」，及急重症預警應用系統，不僅獲

得 2023 未來科技獎，也通過臨床試驗證明了在實際醫療場域中的可行性。

在本院優秀教授的帶領下，學生們的表現也不遑多讓！林宇翔、尤理衡同學在黃俊穎教授的指導下，榮獲第四十七屆國際技能競賽青年組網路安全職類正取國手資格。而由本校教學發展中心於年初所舉辦的「是日未來：跨域實作成果展」，則展現了本院教授帶領學生們通過跨領域協作的創新成果！透過「智慧生活」、「未來肉身」及「明日視界」三大展區，展示了機器人、虛擬實境、物聯網、數位製造、生醫與健康科學等未來科技主題在提升生活質量上的發展潛力。

展望未來，又到了入學報名的時間，本校今年研究所報考人數激增，在 AI 與半導體的報考增幅達 12% 與 15%，其中，又以本院的資工領域系所最為熱門，使得資訊聯招碩士生的錄取率僅有 5.56%。此外，本院過去透過特殊選才，已招收到實戰力強與多面向的學生，今年資訊工程學系也提供了「資訊專長」與「資安專長」兩個特殊選才的入學管道，歡迎對資訊與資安領域有熱忱的高中生們，把握機會推薦自己！

最後，由本校人工智慧系統檢測中心與國家高速網路與計算中心、台灣人工智慧協會共同合辦的「2023 LLM 產業技術交流會」，達成若要發展屬於台灣人使用習慣的 AI 平台，必須推動產學整合的共識。而由本院副院長陳添福教授擔任主任的人工智慧系統檢測中心，更倡議成立「大型模型產學小聯盟」，並邀請企業界共同參與，讓大型語言模型從普適性的通用模組進入特定領域的產業，提供企業訓練出自己的「企業大腦」，為未來開發出更多產業新機會。

資訊學院院長

陳志成

2024.06

Lead Globally with AI

Amidst the ongoing excitement surrounding the semiconductor industry and AI, our college has witnessed numerous exciting advancements in the brand-new year. In addition to the impressive accomplishments of our alumni in the industry, the performance of both faculty and students from our college has been exceptional. With nearly 70 dedicated faculty members, the highest number nationwide, our college has experienced a continuous rise in application rate for graduate programs, underscoring students' preference for our college. Additionally, in March 2024, a delegation comprising over twenty faculty and students from the esteemed Yale University in the United States visited Taiwan. On March 15th, they paid a special visit to College of Computer Science, National Yang Ming Chiao Tung University (NYCU), engaging in profound and insightful discussions with faculty and students on topics such as artificial intelligence. This visit laid the groundwork for subsequent collaborations and the establishment of partnerships. With keen anticipation of ongoing learning and exchange among alumni, faculty, students, and exceptional international talents, our college is committed to nurturing more outstanding individuals for society, thereby upholding Taiwan's prominent position in the global industrial market.

In the first half of this year, NYCU held two ceremonies to award honorary doctorates. C.C. Wei, the CEO of TSMC and an alumnus of the Department of Electronics Engineering, and Simon Lin, the Chairman of Wistron and a graduate of our college, were honored. Lin's early investments and research in AI and related fields not only helped Wistron achieve a total market value exceeding NT$800 billion but also positioned Taiwan as a significant player in the global AI industry. Additionally, two alumni of our college were recognized as distinguished alumni of NYCU during the university's third Outstanding Alumni Award: Shi-Yuan Chen, the chairperson of Optoma, and Liang-You Lee, an independent director of ACE PILLAR and a director of PTSC. Mr. Chen, a founding member of Coretronic Corporation, later led Optoma as an independent brand under Coretronic. Optoma became a global leader in digital projection and imaging solutions, serving over 150 countries worldwide. Mr. Lee, who established the Information Management Association of the Republic of China in 1982, has played a pivotal role in promoting corporate information exchange applications and digital transformation. In recent years, he has served as a consultant, author, and mentor in management, guiding companies in implementing AI big data smart application systems.

Our college is proud to acknowledge the outstanding performance of our young professors. We would like to extend our congratulations to Professor Wei-Chen Chiu for being honored with the 2023 Academia Sinica Early-Career Investigator Research Achievement Award. Additionally, Dr. An-Zi Yen has received a prestigious nomination for the ACLCLP (Association for Computational Linguistics and Chinese Language Processing) Doctoral Dissertation Award. Furthermore, the team led by Professor Vincent S. Tseng has developed "Multi-Objective Series Early Prediction

Technologies and the Alarm System for Critical Care" in smart healthcare. This groundbreaking innovation not only earned the 2023 Future Technology Award but also successfully passed clinical trials, demonstrating its practical feasibility in real medical settings.

With the guidance of our exceptional professors, students have demonstrated commendable performances. Yu-Hsiang Lin and Jasper Yu, advised by Professor Chun-Ying Huang, have earned positions to represent Taiwan in the Youth Category for Network Security at the 47th WorldSkills Competition. Furthermore, the "Future Today: Cross-Domain Practical Achievement Exhibition," hosted by our Teaching Development Center earlier this year, presented innovative accomplishments led by our professors and students in cross-disciplinary practical courses. Organized into three main sections – Smart Living, Future Embodiment, and Tomorrow's Vision – the exhibition illustrated how themes of future technology, including robotics, virtual reality, the Internet of Things, digital manufacturing, biomedicine, and health sciences, contribute to enhancing the quality of life.

As we look ahead, it's time to apply for graduate programs. This year, NYCU's master's programs saw a significant surge in applicants, with increases of 12% in AI and 15% in semiconductor fields. Our computer science department has become the most popular choice, leading to an acceptance rate of only 5.56% for admission into master's programs in Computer Science. The College of Computer Science has previously admitted students with strong practical skills and diverse talents through special selection processes. This year, the Department of Computer Science further offers two special admission tracks: "Computer Science" and "Cybersecurity." We encourage passionate high school students interested in these areas to take advantage of this opportunity and apply!

Finally, the "2023 LLM Technology Exchange Conference'' was held on August 18, 2023, jointly organized by the AI System Benchmarking and Tuning Lab at NYCU, the National High-Speed Network and Computing Center, and the Taiwan Artificial Intelligence Association. The conference concluded that developing an AI platform tailored to Taiwanese user habits requires collaboration between industry and academia. Professor Tien-Fu Chen, Associate Dean of the College of Computer Science and Director of the AI System Benchmarking and Tuning Lab at NYCU, proposed to establish the "Large Model Industry-Academia Small Alliance." This initiative encourages industry participation to adapt large language models from general-purpose modules to specific industry domains, allowing enterprises to develop their own "enterprise brains'' and paving the way for new industrial opportunities.

Dean of the College of Computer Science
2024.06