

# 繼往開來 不斷超越



回顧過去一年，全球疫情依舊嚴峻，面對與病毒共存的新課題，數位化轉型成為社會新常态與挑戰。位於資通訊產業前沿之資訊學院，本院責無旁貸，教學要與時俱進，培育國家產業需要的全球人才；研發要前瞻、基礎要扎根，支持台灣推動下一世代的科技創新與經濟發展。感謝全院師生群策群力，在各方面締造斐然佳績。

本院長期重視產學創新精神，令人振奮的，去年度本校有 18 個團隊獲「2021 年未來科技獎」，獲獎居全國之冠，本院師生參與其中有 6 個研究團，亦為全校之冠。本期收錄得獎技術，包括易志偉教授研究團隊創造新世代的練球方式「教練盒子」，透過動作分析的數據與影像，帶來智慧運動創新。洪瑞鴻教授團隊首創支援完整次世代定序識別基因變體之系統，技術運用廣泛可謂基因工程發展之重要里程碑。吳毅成教授團隊的深度強化式學習技術應用於自駕模型賽車技術，是深度強化式學習具體應用的實踐與突破。

本院師生傑出的獲獎表現亦是本期焦點。恭喜吳毅成教授與「智能點雲技術」研究團隊榮獲 2021 年全球百大科技研發獎，肯定吳教授前期投入前瞻性研究。而謝續平教授獲選為國際知名

刊期 IEEE Transactions on Reliability (TRel) 總編輯，謝教授在資安領域深具國際影響力。另外，本院年輕教授林彥宇、邱維辰、高孟駿、顏安孜等多位老師也囊括各項學術獎項肯定。

國際化為本院推動之重點工作，逐步地提升學生的英語學習環境為重點之一，目前英語授課比例已成長至 30%。本期收錄師生參與英語教學、移地研究及各項國際學術活動，在在都展現我們在推動國際化的努力。當然，隨著疫苗的普及，進入疫後新生活，未來可望逐步開放國際交流之實體活動，本院國際交流活動會更加活絡蓬勃。

111 年 2 月 1 日是陽明交大合校週年，首次的校慶活動以「融合」作為主軸格外有意義。如同合校紀念歌《超越》，飲水思源、繼往開來，能不斷超越。面對未來，除了延續既有的良好學風與傳統下，我們更期盼能開拓出高等教育更多融合的新樣貌及特色。

資訊學院院長

陳志威

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## Drawing the Future from the Past We will Continue to Go Beyond

As we look back at this past year, the global COVID-19 pandemic is still severe. The new issue of coexistence with the virus makes digital transformation a new norm and challenge for society. As a college of Computer Science at the forefront of the information and communication industry, our college has an unshirkable responsibility. Regarding our teaching, we must keep abreast with a constantly changing world to cultivate global talents for domestic industries. Meanwhile, we must keep our research staying on the cutting edge while building a solid foundation of techniques to support Taiwan to promote technological innovation and economic development for the next generation. Thanks to all the students, faculty, and staff for their collective efforts to make outstanding achievements in all aspects.

For a long time, our college has attached great importance to industry-academia innovation. It is so encouraging that 18 teams from our university won the "2021 Future Technology Award" last year, ranking first in the country. Among these teams, six research groups came from our college, which was the highest number of the award in the university. This issue reports award-winning technologies. First of all, Professor Chih-Wei Yi's research team conducts the movement analysis of video and associated data to create a new generation of training methods, CoachBox, which brings intelligent sports innovation. Next, Professor Jui-Hung Hung and his team develop the first complete fast NGS data analysis platform in the world. The widespread usability of such technology would be an important milestone in the development of genetic engineering. Finally, the deep reinforcement learning technology of Professor I-Chen Wu and his team was used to train autonomous driving for miniature racing cars, which illustrates the breakthrough and achievement of deep reinforcement learning.

The outstanding performance of our faculty and students would also be the focus of this issue. Congratulations to Professor I-Chen Wu and his team, who develop "Cloud-based Smart Point Cloud

Processing (CSPCP)," on winning the 2021 R&D 100 Awards, which endorses professor Wu's forward-looking achievement. Professor Shiuhyng Shieh was elected as the Editor-in-Chief of the internationally renowned IEEE Transactions on Reliability (TRel). He has a strong international impact in the field of information security. Furthermore, many young professors of our college, including Yen-Yu Lin, Wei-Chen Chiu, Mong-Jen Kao, and An-Zi Yen, have also been recognized with various academic awards.

Academic internationalization is also a major task that our college promotes. One of our priorities is to level up the English learning environment for our students gradually. Currently, the ratio of English as a Medium of Instruction (EMI) courses already stands at 30%. This issue includes reports of faculty members and students involved in EMI courses, off-site research, and various international academic activities, all of which illustrate our efforts to promote internationalization. Of course, with the increase in immunization coverage, people begin a new life after the pandemic. When the physical activities for international exchange are gradually granted in the future, we sincerely expect that our inter-university collaboration will become more vigorous.

February 1, 2022 is the first anniversary of National Yang Ming Chiao Tung University, and the celebration of the university with the "Fusion" theme is particularly meaningful. Just like the lyric of the commemorating song of the merger, "Beyond," *When we drink water, think of its source. Drawing the future from the past, we will continue to go beyond.* In addition to continuing the excellent academic culture and tradition, we are looking forward to developing more new fusion forms and features in higher education in the future.

Dean of the College of Computer Science

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