國立清華大學第 8 屆傑出產學研究獎得獎人簡介

瞿志行教授研究專長為電腦輔助設計、互動設計與智慧製造，致力跨領域學科的創新性應用，近來關注於擴增實境技術，作為人與人工智慧之協作介面，以解決製造、工業現場的複雜問題。研究成果兼具學術與實用價值，曾榮獲科技部傑出研究獎、中國工業工程學會學術貢獻獎、國科會吳大猷先生紀念獎、清華大學工學院傑出教學獎、產學合作獎與新進人員研究獎等。為提高國內產業的競爭力，成立「擴增實境互動技術」產學聯盟，領導來自於清大、交大、北科大、台科大與國網中心的跨領域團隊，積極推廣擴增實境與人機互動之研發成果。近五年已執行 44 件產學相關計畫，均擔任計畫主持人，合作金額總計為新台幣 3401 萬元；研發成果已獲得 5 項中華民國、4 項美國與 1 項中國發明專利，開發出全球首創之產品雛形：智慧型試鞋機 FiFeet^{TM}；協助成立亞達科技公司，針對半導體、航空與鐵道產業需求，發展結合 AI、擴增實境與工業物聯網之整合性系統，降低作業中的人為疏失；連續四年執行漢翔公司產學計畫，改善其設計自動化能量，可減少 40%產品建模之作業時間；協助中科院建立數位式航空介面設計能量，提高新一代戰機的系統安全性。擔任台灣虛擬與擴增實境協會理事與學術委員會召集人，給予政府部門（國發會、經濟部、文化部）XR 產業的發展建議。

Prof. Chih-Hsing Chu's research interests include computer aided design, interactive design, and smart manufacturing, aiming to solve engineering challenges through interdisciplinary innovation. His recent focus has been on augmented reality (AR) and its industrial applications. AR works as a collaboration interface between human and artificial intelligence to solve complex problems in manufacturing and industry environments. Prof. Chu's research contributions balance well between theoretical novelty and practical values, which lead to prominent awards including MOST Outstanding Research Award, CIIE Excellent Academic Contribution Award, NSC Dr. Ta-You Wu Memorial Research Award, NTHU-CoE Excellent Teaching Award, Outstanding Industry Collaboration Award, NTHU New Faculty Research Award. He has led the Alliance of Highly Interactive Augmented

Reality Technologies sponsored by MOST and industrial partners since 2016 to promote and disseminate the research results in the areas of AR and HCI. During the past 5 years, he has completed 44 industrial projects, all severing as the PI, with a total funding amount of 34-million NTD. He has been granted 5 Taiwan, 4 USA, and 1 China patents during the period. He invented a pioneering virtual shoe try-on system FiFeet^{TM} via technology transfer; started up the ADAT company, which focuses on preventing human errors in manufacturing, railroad, and construction industries using ICT solutions integrated with AI, AR, and IIoT; collaborated with AIDC for 4 consecutive years on developing the company's design automation technology, which results in 40% reduction of the CAD modeling time in new product development; assisted CSIST to establish the proprietary design capability of aeronautic display interface to improve the system safety of the next-generation jet fighter. In addition, Prof. Chu is serving as the council member of TAVAR and thereby giving consultation to the policy making of National Development Council, Ministry of Economic Affairs, and Ministry of Culture of Taiwan.