水 Yu-Cheng Chang









National Taipei University of Technology M.S. in Computer Science and Information Engineering

September 2024 ~ Present

GPA: 4.0 / 4.0 Overall



Papers

[1] Y.-C. Chang*, Y.-X. Lin, Y.-C. Lung, and W. Chien*, "Vision-based Real-time Sign Spelling System for Cross-lingual Translation using Neural Models," accepted for presentation in Proceedings of the 2025 IEEE International Conference on Computation, Big-Data and Engineering, Jun. 2025. (第一及通訊作者)

[2] Y.-C. Chang*, "Pixel-Level Cryptographic Hashing for Image Authentication and Recovery," accepted for presentation in Proceedings of the 2025 IEEE International Conference on Computation, Big-Data and Engineering, Jun. 2025. (獨立著作)

[3] Y.-C. Chang*, H.-Y. Gu, Z.-R. Wu, Z.-Q. Chang, L.-C. Chen, W.-L. Willam Cheong, X.-Y. Lim, and W. Chien*, "Modular Model Stacking Based on YOLO: A Novel Approach for Model Extension Without Retraining," accepted for presentation in Proceedings of the 2025 IEEE International Conference on Computation, Big-Data and Engineering, Jun. 2025. (第一及通訊作者)

[4] W.-M. Xie, C.-C. Yang, Z.-Y. Wei, Y.-X. Lin, Y.-C. Lung, L.-Z. Chen, Z.-R. Wu, Y.-C. Chang*, and W. Chien*, "AI-Driven Analysis of New Energy Technology Development and Strategic Planning in Asia from a Global Perspective," accepted for presentation in Proceedings of the 2025 IEEE International Conference on Computation, Big-Data and Engineering, Jun. 2025. (共同通訊作者)

[5] S.-T. Tsai, Z.-R. Wu*, P.-H. Lin, C.-H. Chen, W. Chien, and Y.-C. Chang*, "Comparative Analysis of Real-time Multiperson Pose Detection in Electrical Industrial Safety Scenarios using YOLOv8-Pose and OpenPose," in Proc. of 2024 IEEE 4th International Conference on Electronic Communications, Internet of Things and Big Data, pp. 327-330, Apr. (共同通訊作者) 2024.

[6] S.-T. Tsai, Z.-R. Wu, Y.-C. Chang*, W.-H Lin, and W. Chien*, "Leveraging Advanced Computer Vision for Hazardous Behavior Monitoring in Campus Safety Maintenance," in Proc. of 2024 IEEE 4th International Conference on Electronic Communications, Internet of Things and Big Data, pp. 507-509, Apr. 2024. (共同通訊作者)

[7] S.-T. Tsai, Y.-C. Chang*, C.-Y. Huang, F.-Y. Yang, W. Chien, and Z.-R. Wu*, "Using Real-time Integrated Computer Vision and Deep Learning for Advanced Factory Safety," in Proc. of 2024 IEEE 4th International Conference on Electronic Communications, Internet of Things and Big Data, pp. 647-649, Apr. 2024. (共同通訊作者)

[8] M.-H. Ho, S.-Y. Huang*, Y.-C. Chang, and C.-W. Ruo, "An Outdoor Rescue System Using LoRa Communication Network," presented at the 2023 IEEE 9th International Conference on Applied System Innovation, Apr. 2023.

Papers

[9] Y.-C. Chang, H.-W. Tsai*, C.-Y. Huang, and Z.-R. Wu, "Based-on Computer Vision Applications for Bus Stop Passenger Detection Systems, "in Proc. of 2023 IEEE 3rd International Conference on Electronic Communications, Internet of Things and Big Data, pp. 152-154, Apr. 2023. (第一作者)

[10] Y.-D. Chen and Y.-C. Chang*, "AI-DAS: AI-Based Driving Assistance System for Scooters for Traffic Accident Avoidance," *Engineering Proceedings*, vol. 55, no. 1, p. 58, 2023. doi: 10.3390/engproc2023055058, Jun. 2023. (通訊作者)

Projects

NSTC Research Grant

Research Project Name

Research Project No.

I-MAS (Intelligent Moto Assistance System)

NSTC 111-2813-C-262-010-E

I-MAS 2.0 (Intelligent Moto Alert System)

NSTC 112-2813-C-262-010-E

Honors

Classification	Event Name	Project Title	Award/Ranking
Competition	2025 捷運盃黑客松「設計創 新•AI 賦能」App 競賽	Nxt-Gen 捷運 Go	Finalist
Publication	IEEE ICCBE 2025	Vision-based Real-time Sign Spelling System for Cross- lingual Translation using Neural Models	Best Conference Paper Award
Invention	2025 莫斯科設計發明展	Face Recognition System	Gold Medal
Competition	2025 E化系統創意應用競賽	基於骨架物件辨識的多使用者 即時於英文拼字翻譯的手語系統	2nd Place
Competition	2025 E化系統創意應用競賽	結合深度學習與即時電腦視覺於 高級工場安全智慧化系統	4th Place
Pitch	ISPARK International Pitching Competition 2024	Real-time AI Safety for Advanced Factories	Outstanding Science and Technology Innovation Award
Invention	2024 華沙世界發明展	Charging Pile Frame To Prevent The Charging Cable From Falling Off	Gold Medal
Competition	2023 E化系統創意應用競賽	應用於鐵路維安之智慧警示系統	1st Place
Competition	2022 車用電子創新發明競賽	植基於深度學習之影像辨識 智慧車輛輔助系統	2nd Place
Certification	Information Technology Specialist	Python	
Certification	Microsoft Technology Associate	Networking Fundamentals	
Certification	Ministry of Labor, Taiwan	Class C of Industrial Wiring	