



Education

M.S., Computer Science and Information Engineering,

National Taipei University of Technology

Fall 2024 ~ Present

GPA: 4.0 / 4.0



Works

1. Teaching Assistant, Linear Algebra (Fall 2024 & Spring 2025)

Assisted in grading, managing course materials, and supporting student learning.

2. Laboratory Network Administrator

Maintained servers, managed network systems, and ensured cybersecurity for the lab environment.

3. Continuing Education High School Teacher (Advanced Programming & Advanced Computer Club)

Taught introductory Python programming and supervised the Advanced Computer Club, covering Generative AI for text-to-image creation, web development, and image/video processing and editing.

Publication Internation Conference

[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. (First Author & Oral Presenter, Best Conference Award)

[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. (Sole-authored Work & Poster Presenter)

[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. (First Author & Oral Presenter)

[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. (Corresponding Author & Poster Presenter)

[5] S.-T. Tsai, Z.-R. Wu*, P.-H. Lin, C.-H. Chen, W. Chien, and Y.-C. Chang*, "Comparative Analysis of Real-time Multi-person 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. 2024. (Corresponding Author & Oral Presenter)



Publication International Conference

- [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. (Corresponding Author & Poster Presenter)
- [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. (Corresponding Author & Oral Present)
- [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. (Co-Authors)
- [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. (First Author & Oral Presenter, Best Conference Award)
- [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. (Corresponding Author & Poster Present)

Publication Domestic Conference

- [1] Yen-Da Chen, **Yu-Cheng Chang***, Hua-Wen Tsai*“應用電腦視覺的手語注音符號辨識與影像分析研究,” presented at the *2023 18th Workshop on Wireless, Ad-Hoc and Sensor Networks*, Aug. 2023. (Corresponding Author & Poster Presenter)
- [2] Yu-Cheng Lung, Yu-Xuan Lin, Yu-Cheng Chang*, Hua-Wen Tsai*, Yen-Da Chen“植基於多模態視覺感知網路於即時語意建構之手語轉譯研究,” presented at the *2025 20th Workshop on Wireless, Ad-Hoc and Sensor Networks*, Aug. 2025. (Corresponding Author & Oral Presenter)
- [3] 蔡華文*, **張育丞***, 楊敦傑, 楊竣捷, 徐茂霖, “應用電腦視覺之大眾運輸維安輔助系統,” presented at the *2023 Symposium on Digital Life Technologies*, May. 2023. (Corresponding Author & Poster Presenter)
- [4] 張哲唯*, 林千瓏, 林郁芮, 江采淳, 陳紫菱, **張育丞**, “基於心率之性向評估手機應用程式實作,” presented at the *Taiwan Academic Network Conference 2022*, “ Dec. 2022. (Co-Authors)
- [5] Y.-D. Chen*, H.-W. Tsai, Y.-Z. Liao, and **Y.-C. Chang**, “基於影像辨識之益智迷宮小遊戲,” presented at the *2022 26th Mobile Computing Workshop*, “ Aug. 2022. (Co-Authors & Poster Presenter)

Publication Book

李國憲, …, 張育丞, 李威儒《生成式AI素養全解: 從模型原理到教育應用的實戰教學書》,” ISBN: 978-696-01-4422-7, Jul. 2025.



Projects NSTC Research Grant

- I-MAS (Intelligent Moto Assistance System), NSTC 111-2813-C-262-010-E, 2022/07/01~2023/02/28.
- I-MAS 2.0 (Intelligent Moto Alert System), NSTC 112-2813-C-262-010-E, 2023/07/01~2024/02/28.



Awards Competition

- [1] 2025 捷運盃黑客松「設計創新」• AI 賦能App 競賽, “Nxt-Gen 捷運Go,” 進入決賽 (爭取前三名)
- [2] 2025 E化系統創新應用競賽, “基於骨架物件的多使用者即時於英文拼字翻譯的手語系統,” 第二名
- [3] 2025 E化系統創新應用競賽, “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,” 優選 (第四名)
- [4] 2023 E化系統創新應用競賽, “應用於鐵路維安之智慧警示系統,” 第一名
- [5] 2023 第四屆大手攜小手智慧創新應用競賽, “應用於鐵路維安之智慧警示系統,” 季軍
- [6] 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,” 第二名

Awards Invention

- 2025 7th Green Idea Invention and Design Fair, “SmartCube Multidimensional Parking System,” Titanium Prize (The best 10% teams in all of the participating teams.), Aug. 2025
- 2025 Japan Design, Idea & Invention Expo, “Internet of Things Fire Alarm,” Gold Medal, Jul. 2025.
- 2024 International Warsaw Invention Show, “Charging Pile Frame To Prevent The Charging Cable From Falling Off,” Gold Medal, Oct. 2024.
- 2024 Japan Design, Idea & Invention Expo, “Four Seasons heating and cooling bed machine,” Gold Medal & Special Award, Jul. 2024.

Awards Pitch

- The 9th International Youth Entrepreneurship Forum 2025, “智慧立體停車管理系統 - 高校空間利用與智能調度,” 決賽入圍獎 (佳作), Jul. 2025.
- ISPARK International Pitching Competition 2024, “Smart Vision Guard - Real-time AI Safety for Advanced Factories,” Outstanding Science and Technology Innovation Award, Sep. 2024

Certification

- Python, Information Technology Specialist (ITS), Jun. 2023.
- Networking Fundamentals, Microsoft Technology Associate (MTA), Jun. 2021.
- 工業配線 丙級, 中華民國勞動部, Sep. 2018.

Talk

- 國中生涯發展教育「九年級技藝教育課程學長姐經驗分享」講座, 新北市立三民高級中學, Jan. 2023.
- 新北市西區資訊種子教師研習暨全體教師研習「智慧你我 玩轉生活», 新北市政府教育局, 新北市蘆洲區鶯江國民小學, Oct. 2022.
- 新北市職業試探暨體驗教育中心【學期間】職業試探暨體驗教育活動, 新北市立淡水高級商工職業學校, Oct. 2022.
- 新北市高級中等學校學科能力精進暨雙連學制推動計劃「科展認識與方向探索」學生講座, Sep. 2022.
- 「十年科展, 十年夢」教師研習講座, 新北市立淡水高級商工職業學校, Aug. 2022.
- 國中生涯發展教育「校友返校升學經驗分享」講座, 新北市立淡水高級商工職業學校, Jun. 2020.

