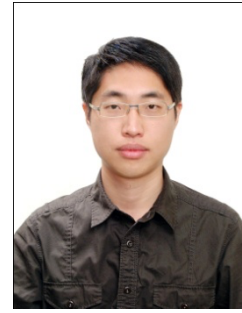


Wei-Ta Chu (朱威達)

Professor

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National Cheng Kung University
No. 1, University Rd., Tainan City, Taiwan 701



Oct. 2, 2024

Wei-Ta Chu received the B.S. and M.S. degrees in Computer Science from National Chi Nan University, Taiwan, in 2000 and 2002, and received the Ph.D. degree in Computer Science from National Taiwan University, Taiwan, in 2006. He was a Professor in National Chung Cheng University from 2007 to 2019. He is now a Professor in the Department of Computer Science and Information Engineering, National Cheng Kung University, Taiwan. His research interests include digital content analysis, multimedia indexing, deep learning, and pattern recognition.

He won Best Poster Award at MMM 2023, IEEE MSA-TC Best Paper Award at ISCAS 2021, and the Best Full Technical Paper Award at ACM Multimedia 2006. He was awarded Outstanding Youth Electrical Engineer Award by the Chinese Institute of Electrical Engineering in 2017, the Distinguished Alumni Award presented by National Chi Nan University in 2014, Best GOLD Member Award presented by IEEE Tainan Section in 2013, the K. T. Li Young Researcher Award presented by Institute of Information & Computing Machinery in 2012, and the Young Faculty Awards presented by National Chung Cheng University in 2011. His advised master students received several thesis awards from Taiwan Institute of Electrical and Electronic Engineering, Institute of Information & Computing Machinery, the Chinese Institute of Electrical Engineering, and the Chinese Image Processing and Pattern Recognition Society. He was a visiting professor at Nagoya University from January to March 2017, and a visiting scholar at Digital Video & Multimedia Laboratory, Columbia University, from July to August 2008. He is an associate editor of IEEE Transactions on Multimedia since 2022, and was an associate editor of IEICE Transactions on Information and Systems from 2016 to 2020. He serves as General Co-Chair of ACM International Conference on Multimedia Asia 2023, Program Co-Chair of International Conference on Multimedia Modeling 2025, International Conference on Machine Vision Applications 2023, IEEE International Conference on Multimedia & Expo 2022, Program Co-Chair of IEEE International Conference on Multimedia & Expo 2022, Program Co-Chair of ACM International Conference on Multimedia Retrieval 2021, Publication Co-Chair of Asian Conference on Computer Vision 2020, Program Co-Chair of International Conference on Multimedia Modelling 2020, Area Chair of ACM International Conference on Multimedia 2019 and 2020, Registration Chair of International Computer Symposium 2020, Program Co-Chair of IEEE International Workshop on Multimedia Signal

Processing 2019, Publicity Co-Chair of Pacific-Rim Conference on Multimedia, Publication Co-Chair of IEEE International Conference on Visual Communications and Image Processing 2018, and Publication Co-Chair of International Computer Symposium 2016.

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1. Personal Information

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Gender Male
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Phone (Office) +886-6-2757575 ext 62557
Email wtchu@gs.ncku.edu.tw
URL <http://mmcv.csie.ncku.edu.tw/~wtchu>

2. Education

Sep. 2002~ Jun. 2006 **Ph.D. Computer Science and Information Engineering**
National Taiwan University, Taipei, Taiwan, R.O.C
Ph.D. Dissertation: *Semantics-based Content Analysis and Organization in Movies and Sports Videos*
Advisor: Prof. Ja-Ling Wu

Sep. 2000~ Jun. 2002 **M.S. Computer Science and Information Engineering**
National Chi Nan University, Nantou, Taiwan, R.O.C.
Master Thesis: *Exploring Computed Synchronization and its Applications for Navigated Hypermedia Documents*
Advisor: Prof. Herng-Yow Chen

Sep. 1996~ Jun. 2000 **B.S. Computer Science and Information Engineering**
National Chi Nan University, Nantou, Taiwan, R.O.C.

3. Academic Employment

Aug. 2019~ **Professor**
Dept. of Computer Science and Information Engineering
National Cheng Kung University, Tainan, Taiwan, R.O.C.

Aug. 2021~ **Deputy Director**
Computer and Network Center

National Cheng Kung University, Tainan, Taiwan, R.O.C.

(計算機與網路中心副主任)

Aug. 2022~Jul. 2023

Director

MS Degree in AI Robotics

Miin Wu School of Computing

National Cheng Kung University, Tainan, Taiwan, R.O.C.

(敏求運算學院人工智慧機器人碩士學位學程主任)

Aug. 2017~Jul. 2019

Professor

Dept. of Computer Science and Information Engineering

National Chung Cheng University, Chiayi, Taiwan, R.O.C.

Aug. 2017~Jul. 2019

Associate Provost

The Office of Academic Affairs, National Chung Cheng University

(中正大學教務處副教務長)

Aug. 2017~Jul. 2019

Director

Center for Teaching and Learning Development, The Office of Academic Affairs, National Chung Cheng University

(中正大學教務處教學發展中心主任)

Aug. 2012~Jul. 2017

Associate Professor

Dept. of Computer Science and Information Engineering

National Chung Cheng University, Chiayi, Taiwan, R.O.C.

Aug. 2013~Jul. 2016

Director

Research Liaison Division, Office of Research and Development, National Chung Cheng University

(中正大學研究發展處建教合作組組長)

Aug. 2015~Jan. 2016

Director

Academic Development Division, Office of Research and Development, National Chung Cheng University

(中正大學研究發展處學術發展組組長)

Aug. 2007~Jul. 2012

Assistant Professor

Dept. of Computer Science and Information Engineering

National Chung Cheng University, Chiayi, Taiwan, R.O.C.

Jul. 2008~Aug. 2008

Visiting Scholar

Digital Video and Multimedia Laboratory
Columbia University, New York, USA

Jul. 2006~Jul. 2007 **Postdoctoral Fellow**
Grad. Institute of Computer Science and Information Engineering
National Taiwan University, Taipei, Taiwan, R.O.C.

Aug. 2006~Jul. 2007 **Adjunct Assistant Professor**
Dept. of Teaching Chinese as a Second Language,
Chung Yuan Christian University, Chungli, Taiwan, R.O.C.

Feb. 2004~Jan. 2005 **Teaching Assistant**
Dept. of Computer Science and Information Engineering
National Taiwan University, Taipei, Taiwan, R.O.C.

Feb. 2000~Jun. 2002 **Teaching Assistant**
Dept. of Computer Science and Information Engineering
National Chi Nan University, Nantou, Taiwan, R.O.C.

4. Course Taught

National Cheng Kung University

- Linear Algebra: spring 2024, spring 2023, spring 2022
- Artificial Intelligence Techniques and Multimedia Analysis: fall 2021
- Artificial Intelligence: Computation and Applications: fall 2021
- Microprocessor Principles and Applications: fall 2020, fall 2019
- Introduction to Artificial Intelligence: fall 2024, fall 2023, fall 2022, fall 2021, fall 2020, fall 2019
- Multimedia Content Analysis: spring 2024, spring 2023, spring 2022, spring 2021, spring 2020
- Deep Learning for Big Visual Data, spring 2023

National Chung Cheng University

- Probability: fall 2018, fall 2017, fall 2016
- Statistics: spring 2019, spring 2017, spring 2016
- Introduction to Optimization: spring 2019, spring 2018, spring 2017, spring 2016, spring 2015, spring 2014, spring 2013, spring 2012
- Multimedia Content Analysis: spring 2021, spring 2020, fall 2018, fall 2017, fall 2016, fall 2015, fall 2014, fall 2012, fall 2011, fall 2010, fall 2009, fall 2008, fall 2007
- Computer Project (II): spring 2014, fall 2013
- Special Topics on Computer Science (I)(III)(V): spring 2014, fall 2013
- Visual Quality Assessment: fall 2013

- Engineering Mathematics: fall 2015, fall 2014, fall 2013, fall 2012
- Introduction to Multimedia System: spring 2011, spring 2010, spring 2009, spring 2008
- Fundamentals of Digital Signal Processing: spring 2013, spring 2012, spring 2011, spring 2010, spring 2009, spring 2008
- Linear Algebra: fall 2011, fall 2010, fall 2009, fall 2008, fall 2007
- Chinese Information Processing: spring 2006 (Chung Yuan Christian Univ.)
- Introduction to Information System and Network: fall 2006 (Chung Yuan Christian Univ.)

5. Research Interests

Multimedia information retrieval, multimedia big data, deep learning, multimedia systems, computer vision, and pattern recognition.

6. Honors & Awards

- | | |
|------|--|
| 2024 | Advisor of TSC Thesis Award, Taiwan Management Institute (指導吳冠渝同學獲得台灣管理學會崇越論文大賞佳作) |
| 2024 | 國科會未來科技獎 (多視角多球員軌跡追蹤技術) |
| 2024 | Advisor of Silver Medal, The Grand Challenge: Computing for the Future, Miin Wu School of Computing, National Cheng Kung University (指導陳宥翔同學獲敏求智慧運算學院「智慧運算創新應用」專題實作競賽創新運算組銀牌獎) |
| 2024 | Advisor of Excellent Master Thesis Award, Institute of Information & Computing Machinery (指導孫諒瑜同學獲中華民國資訊學碩士論文獎佳作) |
| 2023 | Advisor of Excellent Ph.D. Thesis Award, the Chinese Image Processing and Pattern Recognition Society (指導陳文正同學獲中華民國影像處理及圖形識別學會博士論文獎佳作) |
| 2023 | Advisor of Silver Medal, The Grand Challenge: Computing for the Future, Miin Wu School of Computing, National Cheng Kung University (指導孫諒瑜同學獲敏求智慧運算競賽銀牌獎) |
| 2023 | Advisor of Honorable Mentions, The Grand Challenge: Computing for the Future, Miin Wu School of Computing, National Cheng Kung University (指導黃有源同學獲敏求智慧運算競賽佳作) |
| 2023 | Advisor of Excellent Master Thesis Award, Institute of Information & Computing |

- Machinery (指導陳韋志同學獲中華民國資訊學碩士論文獎佳作)
- 2023 Best Poster Award of International Conference on Multimedia Modeling
- 2022 中國石油學會 111 年優秀論文探勘開發類金獎
- 2022 Advisor of Excellent Master Thesis Award, Taiwanese Association for Consumer Electronics (指導王蒂元同學獲中華民國民生電子學會碩士論文獎佳作)
- 2022 Excellent Paper Award of the 35th Computer Vision, Graphics, and Image Processing Conference (佳作論文獎)
- 2022 Outstanding Reviewer, ACM International Conference on Multimedia Retrieval
- 2021 Advisor of Excellent Master Thesis Award, Taiwanese Association for Artificial Intelligence (指導黃顯堯同學獲中華民國人工智慧學會碩士論文獎佳作)
- 2021 Advisor of Excellent Ph.D. Thesis Award, the Chinese Image Processing and Pattern Recognition Society (指導蔡苑倫同學獲中華民國影像處理及圖形識別學會博士論文獎佳作)
- 2021 Advisor of Excellent Master Thesis Award, the Chinese Image Processing and Pattern Recognition Society (指導黃顯堯同學獲中華民國影像處理及圖形識別學會碩士論文獎佳作)
- 2021 Best Paper Award, IEEE Multimedia Systems & Applications Technical Committee (指導陳貞霓同學獲 IEEE MSA-TC Best Paper Award)
- 2021 指導學生在 AI CUP 2020 多項競賽獲獎，包括：
 芒果春季賽佳作：陳韋志、謝炎璋、郭濯瑀、陳宥融
 芒果秋季賽第三名：黃顯堯
 芒果秋季賽第四名優等：郭庭嘉
 芒果秋季賽佳作：何宗翰、陳韋志
 音樂秋季賽第三名：林謙慈、孫諒瑜、應伶軒、許維真
- 2020 Technical Committee, Multimedia Systems & Applications, IEEE Circuits and Systems Society, 2020
- 2020 Best Conference Paper, International Symposium on Computer, Consumer and Control 2020
- 2020 Advisor of Excellent Master Thesis Award, Taiwan Institute of Electrical and Electronic Engineering (指導黃品坤同學獲台灣電子電機工程學會碩士論文獎佳作)
- 2018 Advisor of Excellent Master Thesis Award, Institute of Information & Computing Machinery (指導郭紘睿同學獲中華民國資訊學碩士論文獎佳作)
- 2017 Advisor of Excellent Master Thesis Award, Institute of Information & Computing Machinery (指導吳依玲同學獲中華民國資訊學碩士論文獎佳作)
- 2017 Outstanding Youth Electrical Engineer Award (中國電機工程學會優秀青年工程師獎)
- 2017 Advisor of Excellent Master Thesis Award, Taiwan Institute of Electrical and Electronic Engineering (指導吳依玲同學獲台灣電子電機工程學會碩士論文獎佳作)
- 2016~2018 Outstanding Young Scholar Award, Ministry of Science and Technology of Taiwan (科技

- 部優秀年輕學者研究計畫)
- 2014 Advisor of Excellent Master Thesis Award, Institute of Information & Computing Machinery (指導游家祥同學獲中華民國資訊學碩士論文獎佳作)
- 2014 Outstanding Alumni Award, National Chi Nan University (國立暨南國際大學傑出校友)
- 2013 IEEE Tainan Section Best GOLD Member Award
- 2013 Advisor of Excellent Master Thesis Award, Institute of Information & Computing Machinery (指導張豐麒同學獲中華民國資訊學碩士論文獎佳作)
- 2013 Excellent Work Award, Y.S. Foundation (指導蕭凡凱、林思岑、陳弘毅同學獲第十屆育秀盃創意獎軟體應用類佳作)
- 2012 K. T. Li Young Researcher Award (李國鼎青年研究獎)
- 2012 Young Researcher Award, National Chung Cheng University (國立中正大學青年學者獎)
- 2011 Advisor of Excellent Master Thesis Award, Institute of Information & Computing Machinery (指導曾聖鈞同學獲中華民國資訊學碩士論文獎佳作)
- 2009 Advisor of Master Thesis Award, The Chinese Institute of Electrical Engineering (指導林家弘同學獲中國電機工程學會青年論文獎 第二名)
- 2008 Best PhD Thesis Award, Chinese Image Processing and Pattern Recognition Society (中華民國影像處理與圖形識別學會第一屆博士最佳論文獎 優等)
- 2008 The Exploration Research Award, Pan Wen Yuan Foundation (潘文淵文教基金會考察研究獎)
- 2007 Excellent paper award of the 20th Computer Vision, Graphics, and Image Processing Conference (佳作論文獎)
- 2006 Best technical full paper award, ACM Multimedia Conference
- 48 papers were accepted among 292 full paper submissions (16% acceptance ratio), 3 among these 48 papers were selected as best paper candidates, and only 1 paper was awarded as the best technical full paper.
- 2006 Best Ph.D. Thesis Award from Institute of Information & Computing Machinery (中華民國資訊學會博士論文優等獎)
- Only one Ph.D. thesis in computer science was awarded every year.
- 2006 Excellent work of the 1st Acer Long-term Smile Contest (第一屆龍騰微笑競賽佳作)
- Only 5 among 147 works are awarded
- 2004 IEEE Best Student Paper Award of Consumer Electronics Society - Taipei Chapter and Signal Processing Society - Taipei Chapter.
- 2001 Chung Hwa Rotary Educational Foundation Scholarship (中華扶輪獎學金)
- 2000 全國大專專題競賽佳作

7. Research Grants

7.1 Research Project Grants

Duration	Work	Project Name
Aug. 2024~ Jul. 2026	共同主持人	開發和評估基於 AI 聊天機器人的營養教學策略 國科會 (NSTC 113-2410-H-038 -017-MY2)
Jun. 2023~ May. 2024	主持人	運動科技應用跨領域人才培育計畫-培育運動科技人才及建構結合場域、教學、實驗與實踐之具多元感知、辨識與顯示之智能運動館計畫 教育部
Jan. 2024~ Dec. 2024	共同主持人	透過群眾直播串流來建構增強“觀眾參與度及沉浸式多媒體”之 5G 智慧體育館(2/4) 國科會 (NSTC 113-2425-H-006-007)
Nov. 2023~ Oct. 2024	共同主持人	具有整合協力合作之開放式人工智慧病理分析平台 II(1/2) 國科會 (NSTC 112-2634-F-006-002)
Nov. 2023~ Oct. 2024	主持人	Industry-Academics Cooperation Project – The Applications of 3D Object Trajectory on Baseball Swing Training 產學合作計畫 -- 三維揮棒軌跡於棒球打擊訓練之應用 國科會 (NSTC 112-2662-E-006-021)、傳接球實驗數據股份有限公司
Aug. 2023~ Jul. 2026	主持人	Unsupervised Representation Learning and Human Object Interaction for Action Segmentation, Detection, and Recognition 用於動作切割、偵測與辨識的非監督式特徵學習與人物互動 國科會 (NSTC 112-2221-E-006-136-MY3)
Jan. 2023~ Dec. 2023	共同主持人	透過群眾直播串流來建構增強“觀眾參與度及沉浸式多媒體”之 5G 智慧體育館(1/4) 國科會 (NSTC 112-2425-H-006-001)
Nov. 2022~ Oct. 2023	共同主持人	具有整合協力合作之開放式人工智慧病理分析平台(2/2) 國科會 (NSTC 111-2634-F-006-012)
Sep. 2022~ Jul. 2023	主持人	Industry-Academics Cooperation Project of Sports Technology – The Applications of 3D Object Trajectory on Baseball Pitching and Swing Training 運動科技產學合作計畫 -- 三維物體軌跡於棒球投打訓練之應用 國科會 (NSTC 111-3114-8-006-002)、傳接球實驗數據股份有限公司
Apr. 2022~ Mar. 2023	主持人	運動科技應用跨領域人才培育計畫-培育運動科技人才及建構結合場域、教學、實驗與實踐之具多元感知、辨識與顯示之智能運動館計畫 教育部
Nov. 2021~ Oct. 2022	共同主持人	具有整合協力合作之開放式人工智慧病理分析平台(1/2) 科技部 (MOST 110-2634-F-006-022)
Sep. 2021~ Aug. 2022	主持人	Action recognition 圓展科技股份有限公司

Aug. 2021~ Jul. 2024	主持人	Neural architecture search and model compression for image and video analysis 應用於視訊及影像分析之神經網路架構搜索及模型壓縮技術 科技部 (MOST 110-2221-E-006-127-MY3)
Aug. 2019~ Jul. 2022	主持人	A study of unsupervised and semi-supervised domain adaptation 非監督式與半監督式的域適應問題研究 科技部 (MOST 108-2221-E-006-227-MY3)
Jun. 2019~ May 2020	共同主持人	Enhance and secure user experience in digital finance with machine learning and blockchain technologies 運用機器學習及區塊鏈技術提升數位金融系統之使用體驗及安全性(3/3) 科技部 (MOST 108-2218-E-002-055)
Dec. 2018~ Nov. 2021	主持人	Development of deep learning based hashing techniques for image retrieval 用於影像檢索之基於深度學習的雜湊技術 科技部雙邊協議專案型國際合作研究計畫 (MOST 107-2923-E-194-003-MY3)
Aug. 2018~ Jul. 2020	主持人	Investigation of cross-modal adversarial network for recognition, retrieval, and transfer 跨媒體對抗網路在辨識、檢索、及轉換上的研究 科技部 (MOST 107-2221-E-194-038-MY2)
Jun. 2018~ May 2019	共同主持人	Enhance and secure user experience in digital finance with machine learning and blockchain technologies 運用機器學習及區塊鏈技術提升數位金融系統之使用體驗及安全性(2/3) 科技部 (MOST 107-2218-E-002-054)
Jul. 2018~ Feb. 2019	指導教授	手寫字體風格轉換 科技部 (MOST 107-2813-C-194-040-E)
Jun. 2017~ May 2018	共同主持人	Enhance and secure user experience in digital finance with machine learning and blockchain technologies 運用機器學習及區塊鏈技術提升數位金融系統之使用體驗及安全性(1/3) 科技部 (MOST 106-3114-E-002-009)
Aug. 2016~ Jul. 2018	主持人	Analyzing visual styles in images based on deep learning 基於深度學習分析影像的視覺風格 科技部 (MOST 105-2628-E-194 -001-MY2) (優秀年輕學者研究計畫)
Jul. 2017~ Feb. 2018	指導教授	Sketch recognition using deep learning 科技部 (MOST 106-2813-C-194-042-E)
Aug. 2014~ Jul. 2017	主持人	Employing the wisdom of crowd to intelligent multimedia analysis 應用群眾智能於智慧型多媒體分析 科技部 (MOST 103-2221-E-194-207-MY3)
Jul. 2016~ Feb. 2017	指導教授	海報視覺資訊與電影資料庫之關聯性分析 科技部 (MOST 105-2815-C-194-039-E)
Aug. 2015~ Jul. 2016	主持人	Automatic food image captioning and multilingual menu generation 自動生成食物影像文字描述與多語菜單

		科技部 (MOST 104-2221-E-194-014)
Apr. 2015~ Sep. 2015	共同主持 人	犯罪防治巨量資料應用研究推動之先期規劃計畫 - 犯罪防治巨量資料應用研究推動之先期規劃計畫 科技部 (MOST 104-2420-H-194-007)
Apr. 2015~ Sep. 2015	共同主持 人	巨量資料於地震防減災之分析應用 - 巨量資料於地震防減災之分析應用 科技部 (MOST 104-2119-M-194-003-)
Aug. 2012~ Jul. 2014	主持人	Correlation analysis, retrieval, and privacy preserving of social media 社群媒體之關聯性分析、檢索與隱私保護 國科會 (NSC 101-2221-E-194-005-MY2)
Jul. 2012~ Aug. 2013	主持人	Vehicle detection software for car driving videos 行車記錄器影片中的車輛偵測軟體 工研院
Jul. 2012~ Feb. 2013	指導教授	Image and video analysis based on aesthetics framework 基於美學架構之影像及影片美學分析 國科會 (NSC 101-2815-C-194-018-E)
Aug. 2011~ Jul. 2014	共同主持 人	網宇實體之社交社群智慧研究 國科會 (NSC 100-2221-E-194-027-MY3)
Aug. 2011~ Jul. 2012	主持人	Mining repetitive patterns in images and its applications 影像中的重複性結構探勘與其應用 國科會 (NSC 100-2221-E-194-061-)
Nov. 2010~ Dec. 2011	主持人	Investigation and test of video clustering 影片分群機制研究與測試 工研院
Aug. 2010~ Jul. 2011	主持人	Video and audio content copy detection 視訊與音訊內容複製偵測 國科會 (NSC 99-2221-E-194-036-)
Aug. 2009~ Jul. 2010	主持人	Face clustering and annotation in consumer multimedia content 消費性多媒體內容中的人臉分群與標註 國科會 (NSC 98-2221-E-194-056-)
Jun. 2009~ Mar. 2010	主持人	Software for video copy detection 視訊複製偵測軟體 工研院
Dec. 2008~ Aug. 2009	主持人	Investigation of automatic representative photo selection and smart thumbnail 自動化代表性照片選取與智慧型縮圖處理流程方法與技術分析使用報告 工研院
Aug. 2008~ Jul. 2009	主持人	Organization and presentation system for travel experience 旅遊經驗之組織與呈現系統 國科會 (NSC 97-2221-E-194-050-)

Oct. 2007~	主持人	On using association rule mining in sports event detection
Jul. 2008		應用關聯法則探勘於運動事件偵測 國科會 (NSC 96-2218-E-194-005-)
Jan. 2008~	協同主持	Survey and Design of Analysis/Presentation Modules in Intelligent Digital Frame
Jun. 2008	人	智慧型數位相框中的分析與呈現模組之探討與設計 群璨電腦有限公司

7.2 Education Reform Project Grants

Duration	Work	Project Name
Mar. 2009~ Feb. 2010	課程編撰	教育部資通訊科技人才培育先導型計畫 車載資通訊
Mar. 2009~ Feb. 2010	授課教師	教育部資通訊重點領域課程推廣計畫 課程名稱：多媒體系統
Sep. 2007~ Dec.2007	協同主持人	2007 年惠普科技高等教育教學改善計畫

7.3 International Cooperation Project Grants

Duration	Work	Project Name
Jul. 2014	主持人	短訪計畫(邀請國際科技人士短期訪問) – 名古屋大學 Ichiro Ide 教授 (MOST 103-2912-I-194 -520)
Feb. 2014	主持人	台灣奧地利雙邊大規模跨媒體事件探勘研討會 (Taiwan-Austria Joint Symposium on Large-Scale Cross-Media Event Mining)

7.4 Travel Grants

9th ACM International Workshop on Multimedia Information Retrieval, Augsburg, Germany, Sep. 2007.
NSC Travel Grant

8. Paper Reviewing

8.1 International Conferences

AAAI Conference on Artificial Intelligence – 2022

ACCV Workshop on AI Aesthetics in Art and Media – 2018

ACCV Workshop on Computer Vision Technologies for Smart Vehicle – 2016

ACM International Conference on Internet Multimedia Computing and Service – 2013
ACM International Conference on Multimedia Retrieval – 2012, 2013, 2015, 2016, 2017, 2018, 2019, 2020
ACM Multimedia Conference – 2007, 2012, 2013, 2014, 2016, 2017, 2018, 2019
ACM Multimedia Systems Conference – 2015, 2017, 2019
ACM SIGGRAPH Asia – 2009, 2020
Asia-Pacific Signal and Information Processing Association Annual Summit and Conference – 2013, 2015, 2021
British Machine Vision Conference – 2021
Conference on Technologies and Applications of Artificial Intelligence – 2013, 2014, 2016
Asian Conference on Computer Vision – 2009, 2020
IEEE International Conference on Acoustics, Speech, and Signal Processing – 2020, 2021, 2022
IEEE International Conference on Computer Vision – 2017, 2021
IEEE International Conference on Computer Vision and Pattern Recognition – 2020, 2021, 2022
IEEE International Conference on Image Processing – 2015, 2016, 2017, 2018, 2019, 2020, 2021
IEEE International Conference on Multimedia & Expo – 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021
IEEE International Conference on Multimedia Processing and Retrieval – 2018, 2019, 2020, 2021
IEEE International Conference on Pattern Recognition – 2012, 2016, 2018, 2020
IEEE International Conference on Visual Communications and Image Processing Conference – 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018
IEEE International Symposium on Circuits and Systems – 2005, 2008, 2013
IEEE International Symposium on Multimedia – 2016, 2017
IEEE International Workshop on Mobile Multimedia Computing – 2014, 2015, 2016
IEEE International Workshop on Multimedia Signal Processing – 2020
IEEE Pacific Visualization – 2010
IEEE Visual Analytics Science and Technology – 2014
IEEE Winter Conference on Applications of Computer Vision – 2018, 2019, 2020, 2022
International ACM Workshop on Crowdsourcing for Multimedia – 2014, 2015
International Computer Symposium – 2016
International Conference on Advances in Multimedia – 2012, 2013, 2014, 2015, 2016
International Conference on Communications and Electronics – 2014
International Conference on Cyber-Enabled Distributed Computing and Knowledge Discovery – 2010
International Conference on Database Systems for Advanced Applications – 2020
International Congress on Image and Signal Processing – 2010, 2012, 2013, 2014
International Conference on Internet Multimedia Computing and Service – 2013, 2014, 2015
International Conference on Multimedia Modeling – 2010, 2012, 2013, 2015, 2016, 2017, 2018, 2019
International Conference on Network-Based Information Systems – 2010

International Conference on Pattern Recognition – 2014, 2018, 2020
International Conference on Soft Computing and Pattern Recognition – 2010
International Symposium on Pervasive Systems, Algorithms, and Networks – 2017
International Wireless Internet Conference – 2010
International Workshop on Comics Analysis, Processing and Understanding – 2016, 2017, 2019, 2020
International Workshop on Cooking and Eating Activities – 2015, 2016, 2017, 2018
National Conference on Multimedia Technology – 2016
Pacific Conference on Computer Graphics and Applications – 2008, 2013
Pacific-Rim Conference on Multimedia – 2013, 2014, 2015, 2016, 2018
Pacific-Rim Symposium on Image and Video Technology – 2010, 2013, 2015, 2017
The International Conference on Advanced Technologies for Communications – 2014

8.2 International Journals

ACM Transactions on Embedded Computing Systems – 2012
ACM Transactions on Intelligent Systems and Technology – 2015, 2018
ACM Transactions on Multimedia Computing, Communications, and Applications – 2010, 2014, 2015, 2018
Advances in Multimedia – 2011
Applied Computational Intelligence and Soft Computing – 2014
Computers & Graphics – 2013
Computer Graphics Forum – 2017, 2018
Computer Vision and Image Understanding – 2015
EURASIP Journal on Advances in Signal Processing – 2009, 2010
EURASIP Journal on Audio, Speech, and Music Processing – 2011
Frontiers in Nutrition – 2020
IEEE Access – 2020
IEEE Communications Magazine – 2006
IEEE Computational Intelligence Magazine – 2021
IEEE Multimedia – 2010, 2012, 2013, 2017, 2019
IEEE Transactions on Artificial Intelligence – 2021
IEEE Transactions on Biomedical Circuits and Systems – 2017
IEEE Transactions on Circuits and Systems for Video Technology – 2008, 2010, 2011, 2012, 2013, 2014, 2017, 2018
IEEE Transactions on Emerging Topics in Computational Intelligence – 2017, 2018, 2020
IEEE Transactions on Human-Machine Systems – 2015
IEEE Transactions on Image Processing – 2009, 2010, 2011, 2013, 2018, 2019
IEEE Transactions on Information Theory in Biomedicine – 2009
IEEE Transactions on Knowledge and Data Engineering – 2010, 2015, 2016, 2018

IEEE Transactions on Multimedia – 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019
IEEE Transactions on Systems, Man, and Cybernetics -- Part C: Applications and Reviews – 2010
IEEE Journal of Biomedical and Health Informatics – 2016
IEICE Transactions on Information and Systems – 2011, 2014, 2015, 2019
IET Computer Vision – 2017
Image and Vision Computing – 2015
Information Sciences – 2013, 2014
International Journal on Document Analysis and Recognition – 2018, 2019
International Journal of Multimedia Information Retrieval – 2013, 2020
International Journal of Semantic Web and Information Systems – 2017
IPSJ Transactions on Computer Vision and Applications – 2017
ITE Transactions on Media Technology and Applications – 2018
Journal of Electronic Imaging – 2018
Journal of Information Science and Engineering – 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2017
Journal of Multimedia – 2010, 2011
Journal of Multimodal User Interfaces – 2013
Journal of Signal and Information Processing – 2010, 2011
Journal of Visual Communication and Image Representation – 2007, 2008, 2012, 2013, 2014, 2015, 2018, 2021
Machine Vision and Applications – 2013, 2014, 2016
Multimedia Systems – 2009, 2014, 2016, 2020, 2021
Multimedia Tools and Applications – 2014, 2015, 2016, 2017, 2018, 2019, 2020
Neurocomputing – 2010, 2011, 2012, 2014, 2015, 2017
Signal, Image and Video Processing – 2013, 2014
Signal Processing: Image Communication – 2018, 2019, 2020, 2021
WSEAS Transactions on Signal Processing – 2011

8.3 Local Conferences

台灣網際網路研討會 – 2017, 2018, 2020

台灣軟體工程研討會 – 2017, 2018

全國電信研討會暨春季消息理論與通訊研討會 – 2017

彰雲嘉大學校院聯盟學術研討會 – 2015

National Symposium on Telecommunications (全國電信研討會) – 2011, 2012

Conference on Technologies and Applications of Artificial Intelligence (TAAI) – 2011, 2012, 2013, 2014, 2015, 2016, 2017

Conference on Computer Vision, Graphics, and Image Processing (電腦視覺、圖學暨影像處理研討會) – 2011, 2012, 2014, 2015, 2017, 2018, 2020

National Computer Symposium (全國計算機會議) – 2009, 2013

Workshop on Consumer Electronics (民生電子研討會) – 2010

9. Professional Memberships

- 2021.08~present: Member, 台灣多媒體智慧創新應用學會
- 2020.08~present: Multimedia Systems & Applications Technical Committee, IEEE Circuits and Systems Society
- 2020.01~present: Member, 中華民國人工智慧學會
- 2019.10~present: Life Member, 台灣智慧技術協會
- 2015.09~present: Life Member, Asia-Pacific Signal and Information Processing Association (APSIPA)
- 2016.07~present: Life Member, 台灣電機電子工程學會 (Taiwan Institute of Electrical and Electronic Engineering)
- 2012.08~present : Life Member, 中華民國資訊學會 (Institute of Information & Computing Machinery).
- 2009~present : Member, 中國電機工程學會 (The Chinese Institute of Electrical Engineering)
- 2009~present : Member, 中華民國影像處理與圖形識別學會 (Chinese Image Processing and Pattern Recognition Society)
- 2009~present : Voting member, IEEE Multimedia Communications Technical Committee

- 2024~present : Senior Member, ACM (Association for Computing Machinery)
- 2008~2024 : Member, ACM (Association for Computing Machinery)
- 2017~present : Senior Member, IEEE (Institute of Electrical and Electronics Engineers)
- 2007~2017 : Member, IEEE (Institute of Electrical and Electronics Engineers)
- 2004.01~2006.12 : Student member, IEEE (Institute of Electrical and Electronics Engineers)
- 2006.06~2012.07 : Member, 中華民國資訊學會 (Institute of Information & Computing Machinery)

10. Journal Editorships

- Associate Editor, IEEE Transactions on Multimedia, 2022~
- Associate Editor, IEICE Transactions on Information and Systems, 2016~2020
- Editorial Board Member, *Journal of Signal and Information Processing*, Scientific Research Publishing Inc., USA, (<http://www.scirp.org/journal/jsip/>), Aug. 2010~present

11. Conference Organization and Chairing

- Program Co-Chair, International Conference on Multimedia Modeling, 2025.
- Program Co-Chair, International Conference on Technologies and Applications of Artificial Intelligence, 2024.
- General Co-Chair, ACM International Conference on Multimedia Asia, 2023.
- Program Co-Chair, International Conference on Machine Vision Applications, 2023.
- Program Co-Chair, IEEE International Conference on Multimedia & Expo, 2022.
- Program Co-Chair, ACM International Conference on Multimedia Retrieval, 2021.
- Area Chair, ACM International Conference on Multimedia, 2021.
- Area Chair, IEEE International Conference on Multimedia & Expo, 2021.
- Workshop Organizer, International Computer Symposium, 2020.
- Registration Chair, International Computer Symposium, 2020.
- Area Chair, ACM International Conference on Multimedia, 2020.
- Program Co-Chair, IPPR Conference on Computer Vision, Graphics, And Image Processing, 2020.

- Area Chair, IEEE International Conference on Multimedia & Expo, 2020.
- Organizer, International Joint Workshop on Multimedia Artworks Analysis and Attractiveness Computing in Multimedia, 2020. (in conjunction with ICMR 2020)
- Program Co-Chair, International Conference on Multimedia Modelling, 2020.
- Area Chair, ACM International Conference on Multimedia, 2019.
- Program Co-Chair, IEEE International Workshop on Multimedia Signal Processing, 2019.
- Organizer, International Joint Workshop on Multimedia Artworks Analysis and Attractiveness Computing in Multimedia, 2019. (in conjunction with ICME 2019)
- Organizer, International Workshop on AI Aesthetics in Art and Media, 2018. (in conjunction with ACCV 2018)
- Publicity Co-Chair, Pacific-Rim Conference on Multimedia, 2018.
- Publication Co-Chair, IEEE International Conference on Visual Communications and Image Processing, 2018.
- Special Session Organizer, IEEE International Conference on Visual Communications and Image Processing, 2018. (*Thermal Infra-Red Image Processing*)
- Organizer, International Joint Workshop on Multimedia Artworks Analysis and Attractiveness Computing in Multimedia, 2018. (in conjunction with ICMR 2018)
- Session chair, International Symposium on Multimedia, 2017. (Learning)
- Organizer, International Workshop on Multimedia Artworks Analysis, 2017. (in conjunction with ICME 2017)
- Session chair, ACM International Conference on Multimedia Retrieval, 2017. (Multimedia Applications)
- Publication Co-Chair, International Computer Symposium, 2016.
- Organizer, International Workshop on Multimedia Artworks Analysis, 2016. (in conjunction with ICME 2016)
- Organizer, International Workshop on Mobile Media Big Data Analytics and Application, 2016. (in conjunction with BigMM 2016)
- Special Session Organizer, IPPR Conference on Computer Vision, Graphics, and Image Processing, 2016. (*Deep Learning for Multimedia*)
- Organizer, 彰雲嘉大學校院聯盟學術研討會, 2015.
- Special Session Organizer, International Conference on Multimedia Modelling Conference, 2016. (*Semantics Discovery from Multimedia Big Data*)
- Special Session Organizer, Pacific-Rim Conference on Multimedia, 2015. (*Geospatial and Temporal Social Multimedia Analysis*)
- Session chair, International ACM Workshop on Crowdsourcing for Multimedia, 2014. (Crowdworkers' Motivation)
- Organizer, France Taiwan Multimedia Workshop, 2014.

- Organizer, Taiwan-Austria Joint Seminar on Large-Scale Cross-Media Event Mining, 2014.
- Session chair, Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, 2013. (*Multimedia Signal Processing and Applications*)
- Workshop Organizer, ACM International Workshop on Crowdsourcing for Multimedia, 2013. (in conjunction with ACM Multimedia 2013)
- Organizer, Taiwan-Austria Joint Seminar on Intelligent Multimedia Technologies, 2013.
- Special Session Organizer, International Conference on Multimedia Modeling, 2013. (*Multimedia Retrieval and Management with Human Factors*)
- Workshop Organizer, ACM International Workshop on Crowdsourcing for Multimedia, 2012. (in conjunction with ACM Multimedia 2012)
- 籌備委員, AI Forum, 2012.
- Session chair, The 24th IPPR Conference on Computer Vision, Graphics, and Image Processing, 2011. (IPPR 博士論文獎)
- 會務委員, The 24th IPPR Conference on Computer Vision, Graphics, and Image Processing, 2011.
- Session chair, International Conference on Multimedia Modeling, 2011. (*Multimedia Indexing and Mining*)
- Session chair, The 4th Pacific-Rim Symposium on Image and Video Technology, 2010. (*Detection, Recognition, and Image Retrieval & Social Media Content Mining*)
- Session chair, The 22th IPPR Conference on Computer Vision, Graphics, and Image Processing, 2009. (*Scene Analysis*)

12. Talks

- Incremental Few-Shot Object Detection and Human-Object Interaction Detection with the Help of Vision-Language Models, International Symposium on Novel and Sustainable Technology, Oct. 2024.
- Object Detection and Trajectory Reconstruction in Sports, Three-University Joint Workshop: Leading-Edge Technologies and Ingenuities, Sep. 2024.
- 物件偵測與軌跡重建在運動科技上的應用, 台南應用科技大學, Sep. 2024.
- 物件偵測與軌跡重建在運動科技上的應用, 國家運動科學中心, Aug. 2024.
- Audio-visual Approaches to Predict and Detect Mild Cognitive Impairment and Dementia in Older Adults, 創新健康照護國際研討會, Jun. 2024.
- Pathology Image Classification and Anomaly Detection, National Central University, Mar. 2024.
- 運動軌跡偵測及數據統計呈現, National Yunlin University of Science and Technology, Sep.

2023.

- 運動軌跡偵測及數據統計呈現, 運動與科技的深度對話, Southern Taiwan University of Science and Technology, May 2023.
- 以影像分析為基礎的跨領域合作報告, National Chi Nan University, Apr. 2023.
- *Weakly-Supervised Deep Image Hashing based on Cross-Modal Transformer*, International Conference on Computer Vision and Machine Intelligence, Aug. 2022.
- *Knowledge Distillation for Neural Network Compression*, National Chin-Yi University of Technology, Apr. 2021.
- *Knowledge Distillation for Neural Network Compression*, Workshop on Advances in Deep Learning and Applications (online), Feb. 2021.
- *A Study of Self Distillation for Mango Image Classification*, Taiwan-India Joint Seminar on Artificial Intelligence and Hydraulic Engineering (online), Dec. 2020.
- 人工智慧在影像處理的應用-以熱感應人臉辨識為例, 醫療人工智慧國際研討會, 高雄榮民總醫院, Oct. 2020.
- *Case Studies of Thermal Face Detection, Facial Landmark Detection, and Recognition*, National Tsing Hua University (online), Apr. 2020.
- *Case Studies of Thermal Face Detection, Facial Landmark Detection, and Recognition*, International Conference on Computing, Analytics and Networks (online), Feb. 2020.
- *Case Studies of Thermal Face Detection, Facial Landmark Detection, and Recognition*, 高雄榮民總醫院, Jan. 2020.
- *Case Studies of Thermal Face Detection, Facial Landmark Detection, and Recognition*, Nagoya University, Japan, Oct. 2019.
- 人工智慧在多媒體及電腦視覺之應用, 人工智慧與 5G 行動網路、大數據與金融科技之實務應用研討會, 高雄大學, Sep. 2019
- *Image Style Classification based on Deep Learning*, Ming Chuan University, May 2018.
- *Image Style Classification based on Deep Learning*, National Tsing Hua University, Jan. 2018.
- 深度學習於影像風格分類之應用, 台灣人工智慧年會, Nov. 2017.
- 社群媒體中的數位內容研究及行為分析, 台灣心理學會, Oct. 2017.
- *On the Road towards Intelligent Multimedia Content Analysis*, Appier Corporation, May 2017.
- *Computational Manga Analysis: Face Detection, Style Classification, and Manga Composition*, NEC Corporation, Japan, Mar. 2017.
- *Computational Manga Analysis: Face Detection, Style Classification, and Manga Composition*, Nagoya University, Japan, Mar. 2017.
- *Computational Manga Analysis: Face Detection, Style Classification, and Manga Composition*, Osaka University, Japan, Mar. 2017.
- *Computational Manga Analysis: Face Detection, Style Classification, and Manga Composition*, Osaka Prefecture University, Japan, Mar. 2017.
- *Computational Manga Analysis: Face Detection, Style Classification, and Manga Composition*, Toyohashi University of Technology, Japan, Feb. 2017.
- *Computational Manga Analysis: Face Detection, Style Classification, and Manga Composition*, National Institute of Advanced Industrial Science and Technology, Japan, Feb. 2017.
- *Computational Manga Analysis: Face Detection, Style Classification, and Manga Composition*, National Institute of Informatics, Japan, Feb. 2017.
- *From Point, Line, to Plane: Studying Composition and Styles of Comics from Image Analysis Perspective*, Kansai University, Japan, Jun. 2016.

- *Food Image Captioning with Verb-Noun Pairs Empowered by Joint Correlation*, Nagoya University, Japan, Jun. 2016.
- *On Style-Based Manga Analysis: Feature Design and Style Modeling*, Academia Sinica, Nov. 2015.
- 由點、線至面：從影像分析角度探討漫畫的組成與風格, 台灣資料科學愛好者年會, Aug. 2015.
- *Comics-based Storytelling and Drawing Style Description*, National Taiwan University, Mar. 2015.
- *Basics, Evolution, and Case Studies of Multimedia Content Analysis*, Hon Hai Technology Group, Nov. 2014.
- *Optimized Comics-Based Storytelling for Temporal Image Sequences*, National Chia Yi University, June 2014.
- *Optimized Comics-Based Storytelling for Temporal Image Sequences*, National Tsing Hua University, May 2014.
- *Optimized Comics-Based Storytelling for Temporal Image Sequences*, National Taiwan University of Science and Technology, May 2014.
- *From Signal to Collective Knowledge: Evolution and Case Studies of Multimedia Content Analysis*, National Tsing Hua University, Nov. 2013.
- *Basics, Evolution, and Case Studies of Multimedia Content Analysis*, HTC Corporation, Sep. 2013.
- *Presenting Temporal Image Sequences in Comics*, The University of Tokyo, Japan, Jul. 2013.
- *Size Does Matter: How Does Image Display Size Affect Aesthetic Perception*, The University of Electro-Communications, Japan, Jul. 2013.
- *Size Does Matter: How Does Image Display Size Affect Aesthetic Perception*, Hokkaido University, Japan, Jul. 2013.
- *Animation2Comics: Transforming Animation into Comics*, Taiwan-Austria Joint Symposium on Intelligent Multimedia Technologies, Klagenfurt University, Jun. 2013.
- *Rhythm of Motion Extraction and Rhythm-based Cross-Media Alignment for Dance Videos*, National Taiwan University of Science and Technology, Sep. 2012.
- *Rhythm of Motion Extraction and Rhythm-based Cross-Media Alignment for Dance Videos*, I-Shou University, Apr. 2012.
- *Image/Video Segmentation and Annotation by Social Media Analysis*, Academia Sinica, Sep. 2011.
- *Image/Video Segmentation and Annotation by Social Media Analysis*, Ming Chuan University, Sep. 2011.
- *Image/Video Segmentation and Annotation by Social Media Analysis*, National Chia Yi University, Mar. 2011.
- *Travel Media Analysis from Multiple Perspectives*, National Chi Nan University, Mar. 2010.
- *Travel Media Analysis from Multiple Perspectives*, National Taiwan Normal University, Nov. 2009.
- *Travel Media Analysis from Multiple Perspectives*, Providence University, Oct. 2009.
- *Semantics-based content analysis and organization in movies and sports videos*, CVGIP, Aug. 2008.
- 科技學院升學講座, National Chi Nan University, May 2008.
- *Semantic Analysis for Multimedia Content*, 2008 AI Forum, May 2008.
- *Multimedia content analysis, organization, and presentation*, National Chi Nan University, Jan. 2008.
- *Multimedia content analysis, organization, and presentation*, National Chung Cheng University, Dec. 2007.
- *Multimedia content analysis, organization, and presentation*, National Taiwan Normal University, May 2007.
- *Semantics-based Content Analysis and Organization in Movies and Sports Videos*, National Chung Cheng University, Apr. 2007.
- *Semantic Analysis and Collaborative Presentation of Multimedia Content*, National Taipei University, Mar. 2007.

13. Publications

13.1 PhD Dissertation

Semantics-based Content Analysis and Organization in Movies and Sports Videos, National Taiwan University, 2006.

13.2 Master Thesis

Exploring Computed Synchronization and its Applications for Navigated Hypermedia Documents, National Chi Nan University, 2002.

13.3 Journal Papers

- J-1. Hung-Yu Wu, Ching-Li Kuo, Chen-Yi Lin, and **Wei-Ta Chu**, “Deep Learning in the Advanced Core Sample Porosity Determination with XCT image,” accepted to *Earth Science Informatics*, 2024.
- J-2. Yu-Yuan Huang and **Wei-Ta Chu**, “Learnable Context in Multiple Instance Learning for Whole Slide Image Classification and Segmentation,” accepted to *Journal of Imaging Informatics in Medicine*, 2024.
- J-3. Yi-Chen Chen and **Wei-Ta Chu**, “Positive and Negative Set Designs in Contrastive Feature Learning for Temporal Action Segmentation,” accepted to *IEEE Transactions on Circuits and Systems for Video Technology*, 2024.
- J-4. Liang-Yu Sun and **Wei-Ta Chu**, “Overall Positive Prototype for Few-Shot Open-Set Recognition,” *Pattern Recognition*, vol. 151, pp. 110400, 2024.
- J-5. Satya Rajendra Singh, Roshan Reddy Yedla, Shiv Ram Dubey, Rakesh Sanodiya, **Wei-Ta Chu**, “Frequency Disentangled Residual Network,” *Multimedia Systems*, vol. 30, no. 1, Article No. 9, 2024.
- J-6. Che-Sheng Chu, Di-Yuan Wang, Chih-Kuang Liang, Ming-Yueh Chou, Ying-Hsin Hsu, Yu-Chun Wang, Mei-Chen Liao, **Wei-Ta Chu**, and Yu-Te Lin, “Automated Video Analysis of Audio-visual Approaches to Predict and Detect Mild Cognitive Impairment and Dementia in Older Adults,” *Journal of Alzheimer’s Disease*, vol. 92, no. 3, pp. 875-886, 2023.
- J-7. Dang Khanh Ngan Ho, Yu-Chieh Lee, Wan-Chun Chiu, Yi-Ta Shen, Chih-Yuan Yao, Hung-Kuo Chu, **Wei-Ta Chu**, Nguyen Quoc Khanh Le, Hung Trong Nguyen, Hsiu-Yueh Su, and Jung-Su Chang, “COVID-19 and Virtual Nutrition: A Pilot Study of Integrating Digital Food Models for Interactive Portion Size Education,” *Nutrients*, vol. 14, no. 16, 2022.
- J-8. Cheng-Wen Wu, Ming-Der Shieh, Jenn-Jier Lien, Jar-Ferr Yang, **Wei-Ta Chu**, Tsang-Hai Huang, Han-Chuan Hsieh, Hung-Ta Chiu, Kuo-Cheng Tu, Yen-Ting Chen, Shian-Yu Lin, Jia-Jun Hu,

- Chen-Huan Lin, and Cheng-Siang Jheng, “Enhancing Fan Engagement in a 5G Stadium with AI-Based Technologies and Live Streaming,” *IEEE Systems Journal*, vol. 16, no. 4, pp. 6590-6601, 2022. (SCIE, EI)
- J-9. Jian-Wei Peng, Min-Chun Hu, and Wei-Ta Chu, “An Imitation Learning Framework for Generating Multi-modal Trajectories from Unstructured Demonstrations,” *Neurocomputing*, vol. 500, pp. 712-723, 2022. (SCIE, EI)
- J-10. Wen-Cheng Chen, Wan-Lun Tsai, Huan-Hua Chang, Min-Chun Hu, and Wei-Ta Chu, “Instant Basketball Defensive Trajectory Generation,” *ACM Transactions on Intelligent Systems and Technology*, vol. 13, no. 1, Article No. 3, 2022. (SCIE, EI)
- J-11. Chien-Wen Chen, Min-Chun Hu, Wei-Ta Chu, and Jun-Cheng Chen, “A Real-time Sculpting and Terrain Generation System for Interactive Content Creation,” *IEEE Access*, vol. 9, pp. 114914-114928, 2021. (SCIE, EI)
- J-12. Wei-Ta Chu, Yu-Hsuan Liang, and Kai-Chia Ho, “Visual Weather Property Prediction by Multi-Task Learning and Two-Dimensional RNNs,” *Atmosphere*, vol. 12, no. 5, Article 584, 2021.
- J-13. Chen-Ni Chen and Wei-Ta Chu, “How It Flies and Why It Flies? Volleyball Trajectory Segmentation and Classification,” *IEEE Transactions on Circuits and Systems II: Express Briefs*, vol. 68, no. 5, pp. 1591-1595, 2021. (SCIE, EI) (IEEE MSA-TC Best Paper Award)
- J-14. Wei-Ta Chu and Si-Heng Huang, “Multi-Label Image Recognition by Using Semantics Consistency, Object Correlation, and Multiple Samples,” *Journal of Visual Communication and Image Representation*, vol. 77, Article 103067, 2021. (SCIE, EI)
- J-15. Wei-Ta Chu and Zong-Wei Pan, “Semi-Supervised 3D Human Pose Estimation by Jointly Considering Temporal and Multiview Information,” *IEEE Access*, vol. 8, pp. 226974-226981, 2020. (SCIE, EI)
- J-16. Wei-Ta Chu, Hideo Motomura, Norimichi Tsumura, and Toshihiko Yamasaki, “A Survey on Multimedia Artworks Analysis and Attractiveness Computing in Multimedia,” *ITE Transactions on Media Technology and Applications*, vol. 7, no. 2, pp. 60-67, 2019.
- J-17. Wei-Ta Chu and Wei-Wei Li, “Manga Face Detection based on Deep Neural Networks Fusing Global and Local Information,” *Pattern Recognition*, vol. 86, pp. 62-72, 2019. (SCIE, EI)
- J-18. Wei-Ta Chu and Yi-Ling Wu, “Image Style Classification based on Learnt Deep Correlation Features,” *IEEE Transactions on Multimedia*, vol. 20, no. 9, pp. 2491-2502, 2018. (SCIE, EI)
- J-19. Wei-Ta Chu and Ya-Lun Tsai, “A Hybrid Recommendation System Considering Visual Information for Predicting Favorite Restaurants,” *World Wide Web Journal*, vol. 20, no. 6, pp. 1313-1331, 2017. (SCIE, EI)
- J-20. Wei-Ta Chu, Xiang-You Zheng, and Ding-Shiuan Ding, “Camera as Weather Sensor: Estimating Weather Information from Single Images,” *Journal of Visual Communication and Image Representation*, vol. 46, pp. 233-249, 2017. (SCIE, EI)
- J-21. Wei-Ta Chu and Wei-Han Huang, “Cultural Difference and Visual Information on Hotel Rating Prediction,” *World Wide Web Journal*, vol. 20, no. 4, pp. 595-619, 2017. (SCIE, EI)

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- IC-94. **W.-T. Chu**, W.-H. Cheng, J.-L. Wu, and Y.-J. Hsu, "A Study of Semantic Context Detection by Using SVM and GMM Approaches," *Proceedings of the IEEE International Conference on Multimedia & Expo*, vol. 3, pp. 1591-1594, 2004.
- IC-95. W.-H. Cheng, **W.-T. Chu**, and J.-L. Wu, "Semantic Context Detection based on Hierarchical Audio Models," *Proceedings of the 5th ACM SIGMM International Workshop on Multimedia Information Retrieval*, pp. 109-115, 2003.
- IC-96. C.-C. Ho, **W.-T. Chu**, C.-H. Huang, and J.-L. Wu, "User-Oriented Approach in Spatial and Temporal Domain Video Coding," *Proceedings of the 4th IEEE Pacific-Rim Conference on*

Multimedia, 2003.

- IC-97. **W.-T. Chu**, and H.-Y. Chen, “Multiple Granularity Access to Navigated Hypermedia Documents Using Temporal Meta-Information,” *The 3rd IEEE Pacific-Rim Conference on Multimedia*, 2002. (in *Lecture Notes in Computer Science*, vol. 2532, pp. 1227-1234, 2002.) (SCIE, EI)
- IC-98. **W.-T. Chu**, and H.-Y. Chen, “Cross-Media Correlation: A Case Study for Navigated Hypermedia Documents,” *Proceedings of the ACM Multimedia Conference*, pp. 57-66, 2002. (Acceptance ratio=18%)
- IC-99. **W.-T. Chu**, K.-T. Hsu, and H.-Y. Chen, “Design of an Alignment System for Synchronized Speech-Text Presentation,” *Proceedings of Distributed Multimedia Systems*, pp. 86-93, 2001.

13.6 Local Conferences

- LC-1. Wen-Cheng Chen, Chu-Song Chen, **Wei-Ta Chu**, and Min-Chun Hu, “Entropy Gain-Driven and Frontier Guided Autonomous Exploration with Reinforcement Learning,” Conference on Computer Vision, Graphics, and Image Processing, 2022. (佳作論文獎)
- LC-2. Wen-Cheng Chen, Chu-Song Chen, **Wei-Ta Chu**, and Min-Chun Hu, “Autonomous Environment Exploration with Reinforcement Learning and Inertial SLAM,” Conference on Computer Vision, Graphics, and Image Processing, 2022.
- LC-3. Wen-Cheng Chen, Jing-Xiang Zhang, **Wei-Ta Chu**, and Min-Chun Hu, “Sparse Visual Localization Based on Spatial Relation Codes,” Conference on Computer Vision, Graphics, and Image Processing, 2022.
- LC-4. Nico, Jian-Wei Peng, **Wei-Ta Chu**, and Min-Chun Hu, “Camera Calibration and Player Tracking Free Basketball Tactics Recognition via Trajectory Reconstruction,” Conference on Computer Vision, Graphics, and Image Processing, 2022.
- LC-5. Jian-Wei Peng, Min-Chun Hu, and **Wei-Ta Chu**, “Dance Motion Synthesis Using Motion Graphs with BPM Alignment and Style Consistency,” *Computer Graphics Workshop*, 2022.
- LC-6. Yi-Ju Sung and **Wei-Ta Chu**, “A Manga Browser based on Convolution Neural Network,” *Computer Vision, Graphics, and Image Processing Conference*, 2020.
- LC-7. 黃正宇, 游家祥, **朱威達**, “視覺化故事書產生引擎,” *民生電子研討會*, pp. 1805-1813, 2011.
- LC-8. **W.-T. Chu**, T.-M. Yang, and J.-J. Yu, “Product Quantization for Video Copy Detection,” *Proceedings of 24th Computer Vision, Graphics, and Image Processing Conference*, 2011.
- LC-9. 張豐麒, 黃俊璋, 何秉軒, **朱威達**, “跨智慧型手機與 PC 之直覺操作介面設計,” *民生電子研討會*, pp. 127-131, 2010.
- LC-10. **W.-T. Chu**, P.-C. Chuang, and J.-J. Yu, “Video Copy Detection Based on Bag of Trajectory and Two-Level Approximate Sequence Matching,” *Proceedings of the 23th Computer Vision*,

Graphics, and Image Processing Conference, 2010.

- LC-11. **W.-T. Chu**, C.-T. Hung, and J.-J. Yu, "Object Segmentation Based on Common Information between Images," *Proceedings of the 22th Computer Vision, Graphics, and Image Processing Conference*, 2009.
- LC-12. **W.-T. Chu**, M.-C. Tien, Y.-T. Wang, C.-W. Chou, K.-Y. Hsieh, and J.-L. Wu, "Event Detection in Tennis Matches Based on Real-World Audiovisual Cues," *Proceedings of the 20th Computer Vision, Graphics, and Image Processing Conference*, pp. 541-548, 2007. (佳作論文獎)
- LC-13. **W.-T. Chu** and J.-L. Wu, "Explicit Baseball Event Detection by Combining Visual and Speech Information," *Proceedings of the 19th Computer Vision, Graphics, and Image Processing Conference*, pp. 249-252, 2006.
- LC-14. **W.-T. Chu** and J.-L. Wu, "Detection of Spirited Incidental Music in Movies," *Proceedings of Workshop on Computer Music and Audio Technology*, 2005.
- LC-15. W.-H. Cheng, **W.-T. Chu**, and J.-L. Wu, "A Visual Focus Detection Framework for Video Sequences," *Proceedings of Workshop on Consumer Electronics and Signal Processing*, 2004. (Best student paper award)
- LC-16. K.-Y. Liu, H.-L. Wu, M.-W. Lai, **W.-T. Chu**, B.-H. Wu, and H.-Y. Chen, "Exploring Interactive Multimedia Technologies for Web-based ESL Learning," *Proceedings of the Sixth International Conference on Multimedia Language Education, ROCMELIA*, pp. 181-191, 2002.
- LC-17. 賴茂濊, **朱威達**, 陳恆佑, "網路式英語聽力訓練系統," *民生電子研討會*, 2001.
- LC-18. 陳恆佑, 宋如瑜, **朱威達**, 吳獻良, "多媒體教學系統在華語文課程上的應用," *5th Global Chinese Conference on Computers in Education*, pp. 1060-1066, 2001.

13.7 Demonstration

- D-1. Guan-Yu Wu, Chun-Ho Hung, Hsuan-Wei Chen, and **Wei-Ta Chu**, "A Trajectory-based Statistics and Tactics Analysis System for Table Tennis," *Proceedings of ACM International Conference on Multimedia in Asia*, Article No. 107, 2023.
- D-2. Ting-Hsuan Chou and **Wei-Ta Chu**, "Automatic Baseball Pitch Overlay," *Proceedings of ACM International Conference on Multimedia Retrieval*, pp. 599-602, 2021.
- D-3. **W.-T. Chu** and H.-H. Wang, "動畫轉漫畫技術," *Computer Vision, Graphics, and Image Processing Conference*, 產學媒合發表會, 2012.
- D-4. **W.-T. Chu** and C.-C. Huang, "視訊新聞報導切割與群聚技術," *Computer Vision, Graphics, and Image Processing Conference*, 產學媒合發表會, 2011.

- D-5. **W.-T. Chu** and C.-H. Lin, “Automatic Summarization of Travel Photos Using Near-Duplication Detection and Feature Filtering,” *Proceedings of ACM Multimedia Conference*, Multimedia Grand Challenges, pp. 1129-1130, 2009.
- D-6. **W.-T. Chu** and J.-L. Wu, “Exploring Broadcasting Baseball Videos based on Multimodal and Multidisciplinary Study,” *Proceedings of IEEE International Conference on Multimedia & Expo*, pp. 8, 2007.
- D-7. J.-C. Chen, **W.-T. Chu**, J.-H. Kuo, C.-Y. Weng, and J.-L. Wu, “Audiovisual slideshow: Present Your Journey by Photos,” *Proceedings of ACM Multimedia Conference*, pp. 955-956, 2006.
- D-8. K.-Y. Liu, N. Huang, B.-H. Wu, **W.-T. Chu**, and H.-Y. Chen, “The WSML System: Web-based Synchronization Multimedia Lecture System,” *Proceedings of the ACM Multimedia Conference*, pp. 662-663, 2002.

13.8 Others

- O-1. Cheng-Yueh Wu, Hung-Yu Wu, Bieng-Zih Hsieh, **Wei-Ta Chu**, Ching-Ching Yang, Chih-Wen Wang, Ting-Yu Yeh, Chien-Hao Shen, and Guan-Zhi Chen, “Oil Layer Identification by AI Technology with Well Logging,” 台灣石油地質, 第四十五期, pp. 273-287, 2021.
- O-2. **朱威達**, 黃朝琴, 徐明宏, “Broadcast News Story Clustering without Prior Knowledge,” 影像與識別 (Image & Recognition), vol. 19, no. 1, pp. 48-72, 2013.
- O-3. Kuan-Ta Chen and **Wei-Ta Chu**, “Crowdsourcing for Image Understanding Research,” IEEE COMSOC E-Letter, vol. 8, no. 1, pp. 30-32, 2013.
- O-4. **朱威達**, “旅遊經驗之組織與呈現系統,” 工程科技通訊, 第一一零期, pp. 83-87, 2011.
- O-5. J.-L. Wu and **W.-T. Chu**, “Audio and Video Semantic Analyses and Its Applications,” International Workshop on Task-Relevant Ubiquitous Media Access, 2005.
- O-6. Y.-S. Tung, **W.-T. Chu**, W.-H. Cheng, T.-J. Pan, H.-S. Chen, and J.-L. Wu, “FGS Anchor Sequences for Call for Evidence on Scalable Video Coding Advances and Related Tools,” *ISO/IEC JTC1/SC29/WG11 MPEG2002/M9821*, July 2003.
- O-7. 陳恆佑, **朱威達**, 吳獻良, 洪政欣, “網路影音教材查詢及同步點播,” 隔空教育論叢年刊第十二輯, pp. 109-120, 2000.

14. System Development and Online Demo

1. Tiling Slideshow

<http://www.cmlab.csie.ntu.edu.tw/TilingSlideshow/>

2. Tennis Video Analysis:

<http://www.cmlab.csie.ntu.edu.tw/~wtchu/tennis/index.html>

3. Baseball Video Analysis: <http://www.cmlab.csie.ntu.edu.tw/~wtchu/baseball/index.html>

4. Web-based Synchronized Multimedia Lecture System: (developed when I was a master student in National Chi Nan University)

<http://english.csie.ncnu.edu.tw>

<http://chinese.csie.ncnu.edu.tw>

5. 蝴蝶生態面面觀

<http://d1m.ncnu.edu.tw/butterfly>

15. Student Advised

15.1 PhD Students

2021 入學：陳貞霓 (quit)

2020 入學：曹全偉 (quit)

2018 入學：Lan Huong Nguyen (quit)

Alumni:

Date	Name	Thesis
01/2023	彭建璋	Sequence Generation Through Imitation Learning (透過模仿學習之序列生成)
12/2022	陳文正	Scalable Neural Memory for Spatial Inference in 3D Scenes (用於三維場景空間推理的可擴展類神經記憶)
08/2022	陳建文	A Memory Efficient Framework for Interactive Digital Content Creation in Virtual Reality (用於虛擬實境數位互動創作系統之高效架構)
06/2021	蔡苑倫	Basketball Tactical Training Based on Virtual Reality and Interaction Technology (基於虛擬實

15.2 Master Students

2024 入學：劉世文, 劉曉甄, 林儀承, 邱議霏, 陳諺彰, 沈郁瑄

2023 入學：潘玠佑, 陳宥翔, 呂沂瑄, 范瑄育, 譚丞岡

2022 入學：陳靖憲, 陳嘉儀, 黃有源, 吳冠渝, 賴禹辰, 李宗霖, 樊紹萱, 王慧萱

2021 入學：張慈殷, 陳奕辰, 孫諒瑜, 王翊芃, 劉益程, 陳亮嘉, 莊智宇

2020 入學：陳韋志, 楊晴晴, 王蒂元, 蔡佳樺, 楊奕廷, 溫展儀

2019 入學：黃顯堯, 曹維廷, 陳貞霓, 何宗翰

2018 入學：黃品坤, 黃思恒, 林承熙, 潘宗煒, 梁育瑄

2017 入學：劉玉蕙, 黃立緯, 范祐慈, 柯林佑

2016 入學：何開加, 郭紘睿, 陳柏廷, 游智棋, 徐郁婷

2015 入學：吳若寧, 吳依玲, 李韋緯, 劉雨鑫, Samuel Indra Gunawan Situmeang, 朱皓安, 鄭弘煒

2014 入學：丁鼎軒, 高銘治, 蔡亞倫, 林家興

2013 入學：鄭為中, 邱志豪, 周雍傑, 楊宗翰, 黃韋翰, 張瀚元

2012 入學：徐漢農, 游家祥, 鄭翔祐, 趙英傑

2011 入學：張豐麒, 黃俊璋, 徐明宏, 劉帆

2010 入學：陳志豪, 王星翰, 張懿聖, 陳昱光

2009 入學：李承融, 楊子旻, 黃聖鈞, 林琮哲

2008 入學：劉文龍, 李孟倫, 莊柏祺, 蔡尚穎, 黃朝琴

2007 入學：蔡文河，林家弘，李亞霖，洪建達，林哲正，蔡明宏

Alumni:

Date	Name	Thesis
07/2024	李宗霖	MapLlama: Using Multi-view Data Conversion and Fine-tuned Large Language Model for MapQA (MapLlama : 利用多視角資料轉換和微調的大型語言模型進行地圖問答)
07/2024	吳冠渝	Incremental Few-Shot Object Detection Leveraging Enhanced Visual-Language Features (利用增強視覺語言特徵進行增量式少樣本物件偵測)
06/2024	陳靖憲	CLTP: Contrastive Language-Trajectory Pretraining for Trajectory Analysis (對比語言軌跡預訓練於軌跡分析)
12/2023	黃有源	ViT-based Aggregator and Group Features in Multiple Instance Learning for Whole Slide Image Classification and Segmentation (應用於全切片影像分類與分割的 ViT 聚合器與基於組特徵的多實例學習方法)
12/2023	劉益程	Chart Question Answering based on Modality Conversion and Large Language Models (基於模態轉換和大型語言模型的視覺問答)
07/2023	王翊芃	Multiple Player Tracking with 3D Position Projection and Spatial-Temporal Information in Multi-View Volleyball Videos (多視角排球影片中考慮三維位置對應與時空資訊的多球員追蹤)
07/2023	張慈殷	Occlusion-Aware Manga Character Re-identification with Contrastive Learning (以對比式學習進行遮蔽感知的漫畫人物重識別)
06/2023	孫諒瑜	Overall Positive Prototype for Few-Shot Open-Set Recognition (少樣本開放資料識別的整體正原型)
06/2023	陳奕辰	Positive and Negative Set Designs in Contrastive Feature Learning for Temporal Action Segmentation (對比特徵學習中正負樣本設計應用於動作切割)
08/2022	蔡佳樺	Multimodal Fusion with Cross-Modal Attention for Action Recognition in Still Images (應用基於跨模態注意力的多模態融合於靜態影像動作辨識)
08/2022	陳韋志	Self-Supervised Self Distillation (基於自監督式學習的自蒸餾學習)
07/2022	王蒂元	Audio-visual Approaches to Predicting and Detecting Mild Cognitive Impairment and Dementia in Older Adults (基於視覺與聽覺資訊之偵測老人輕度認知障礙及失智症)
07/2022	楊晴晴	Weakly-Supervised Deep Image Hashing based on Cross-Modal Transformer (基於跨模態深度學習之弱監督式影像雜湊技術)
07/2022	楊奕廷	Manga Text Detection with Manga-Specific Data Augmentation and Its Applications on Emotion Analysis (基於針對漫畫資料增強之漫畫文字偵測及其漫畫情緒分析應用)
07/2021	陳貞霓	How It Flies and Why It Flies? Volleyball Trajectory Segmentation and Classification (球如何飛行與為何飛行?排球軌跡切割與分類)
07/2021	何宗翰	A Multi-Scale Thermal-to-Visible Face Synthesis System with Studies of High-Frequency Information and Race Bias Issues (結合高頻資訊及種族偏差研究的熱影像到可見光多尺度

		人臉合成系統)
07/2021	曹維廷	Multi-Class Novelty Detection with Generated Hard Novel Features (藉由生成困難的新奇特徵來達到多類別新奇檢測)
07/2021	黃顯堯	Searching by Generating: Flexible and Efficient One-shot NAS with Architecture Generator (透過生成進行搜索：基於架構生成器之彈性且高效一次性神經網路搜索)
07/2020	張瑜真	Semi-supervised Many-to-many Music Timbre Transfer (基於半監督式學習的多對多域之間樂器音色轉換)
07/2020	張園華	Autoregressive Generation for Basketball Defensive Trajectory (籃球比賽防守軌跡之自迴歸生成)
07/2020	蔡雨芝	EMVGAN: Emotion-Aware Music-Video Common Representation Learning via Generative Adversarial Networks (具情緒感知之音樂及影片共同特徵空間生成模型)
07/2020	黃品坤	Thermal Face Recognition based on Multi-Scale Image Synthesis (基於多尺度影像合成的熱感應人臉辨識)
07/2020	潘宗煒	Weakly Supervised 3D Human Pose Estimation by Joint Considering Temporal and Multiview Information (共同考慮時間及多視角資訊的弱監督式人體三維姿態預估)
07/2020	梁育瑄	Visual Weather Property Prediction by Multi-Task Learning and Two-Dimensional RNNs (通過多任務學習和二維遞歸神經網路預估影像中的天氣屬性)
07/2020	黃思恆	Multi-Label Image Recognition by Using Semantics Consistency, Object Correlation, and Multiple Samples (應用語義一致性、物件相關性與多重樣本於多標籤圖像辨識)
07/2019	劉玉蕙	Thermal Facial Landmark Detection by Deep Multi-Task Learning (基於多任務學習的熱感應影像人臉特徵點偵測)
07/2019	范佑慈	Photo Filter Classification and Filter Recommendation without Much Manual Labeling (濾鏡分類與毋須人工標註的濾鏡推薦系統)
07/2019	黃立緯	Attribute-Aware Multi-Scale Image Generation with Residual Learning (結合殘差式學習之多尺度屬性感知影像生成)
07/2019	柯林佑	BatikGAN: A Generative Adversarial Network for Batik Creation (BatikGAN: 一個用於蠟染影像創作的對抗式生成網路)
07/2019	劉雨鑫	Spatiotemporal Modeling and Label Distribution Learning for Video Summarization (應用時空模型與標籤分布學習摘要影片)
07/2018	朱皓安	A Genetic Programming Approach to Integrate Multilayer CNN Features for Image Classification (使用基因規劃法整合卷積神經網路多層特徵用於影像分類)
07/2018	吳若寧	A Parametric Study of Deep Perceptual Model on Visible to Thermal Face Recognition (基於深度感知模型的遠紅外光人臉影像辨識之參數研究)
07/2018	何開加	Visual Weather Property Prediction (以視覺資訊預估天氣屬性)
07/2018	游智棋	Text Detection in Manga by Deep Region Proposal, Classification, and Regression (基於深度網路區域提案分類及回歸偵測漫畫中的文字區塊)
07/2018	郭紘睿	Multi-Stream Networks for Multi-Sampled Multi-Label Image Classification (應用多向神經網路於多圖片多標籤分類)

07/2018	徐郁婷	Depth-Aware Image Colorization Network (深度感知之影像著色類神經網路)
07/2017	吳依玲	Image Style Classification based on Learnt Deep Correlation Features (應用自動學習的深度相關性特徵於影像風格分類)
07/2017	李韋緯	Face Detection in Manga based on Deep Neural Network (利用深度學習實作漫畫人臉偵測)
07/2017	高銘治	A Study on Summarizing Blog Articles by Using Image-Text Alignment (使用影像與文字對齊技術摘要部落格文章)
12/2016	Samuel Situmeang	Badminton Video Analysis based on Spatiotemporal and Stroke Features
07/2016	蔡亞倫	A Restaurant Recommender System Considering Visual Information (考慮視覺資訊之餐廳推薦系統)
07/2016	張瀚元	Advertisement Detection, Segmentation and Classification for Newspaper Images and Website Snapshots (針對報紙影像及網站快照做廣告偵測、切割及分類)
07/2016	林家興	Food Image Captioning with Verb-Noun Pairs Empowered by Joint Correlation (聯合模型相關性產生動詞名詞配對描述食物影像)
07/2016	丁鼎軒	Estimating Weather Information from Image with Random Forests (使用隨機森林從單張影像預測天氣資訊)
07/2016	楊宗翰	A Study of Combining Re-coloring and Adding Patterns to Images for Dichromats (研究結合重新著色及加入圖案的影像對於色盲者的影響)
01/2016	黃韋翰	Hotel Recommendation Considering Visual Information and Cultural Difference (考慮視覺資訊及文化差異於旅館推薦)
07/2015	邱志豪	Predicting Occupation from Images by Combining Face and Body Context Information (結合人臉及身體脈絡資訊於影像中預測職業)
07/2015	周雍傑	On Broadcasted Game Video Analysis: Event Detection, Highlight Detection, and Highlight Forecast (遊戲視訊分析：事件偵測及精彩片段偵測與預測)
07/2015	鄭為中	Manga-Specific Features and Latent Style Model for Manga Style Analysis (漫畫影像特徵與潛藏風格模型用於漫畫風格分析)
01/2015	徐漢農	News Story Clustering with Fisher Embedding from What and How Aspects (基於 Fisher Embedding 之新聞報導分群)
07/2014	游家祥	Optimized Comics-Based Storytelling for Temporal Image Sequences (用於時序性影像序列之最佳化漫畫敘事系統)
07/2014	鄭翔祐	A Camera as A Weather Sensor: Estimating Weather Information from a Single Image (以相機為天氣感測器：從影像預估天氣資訊)
07/2014	趙英傑	Design and Statistical Analysis of Manga-Specific Features for Manga Style Study (用於日式漫畫風格研究之影像特徵設計與統計分析)
01/2014	劉帆	Mathematical Formula Detection in Heterogeneous Document Images (異質性文件影像中的數學方程式偵測)
07/2013	黃俊璋	Evaluation of Product Quantization for Image Recognition (評估乘積量化用於影像辨識之效能)

07/2013	陳昱光	Investigation of How Image Display Size Affects Aesthetic Perception (探討影像顯示大小如何影響影像美感)
07/2013	徐明宏	Fast Object Detection and Tracking Using Multistage Particle Window Deformable Part Model (利用階段式粒子視窗之可變形部件模型的快速物件偵測與追蹤)
07/2013	張豐麒	A Privacy-Preserving Bipartite Graph Matching Framework for Multimedia Analysis and Retrieval (用於多媒體分析與檢索的隱私保護二元圖配對架構)
07/2012	張懿聖	Street Sweeper: Detection and Removal of Vehicles in Google Street View Images (街景清道夫：自 Google 街景圖中偵測與去除車輛)
07/2012	王星翰	Animation2Comics: Transforming Animation Videos into Comics (影片轉漫畫：將動畫影片轉換為漫畫)
07/2012	陳志豪	Color CENTRIST: A Color Descriptor for Scene Categorization (Color CENTRIST：用於場景分類的顏色描述子)
07/2011	林琮哲	Logo Recognition in Real-World Images by Using Visual Patterns (利用視覺化樣板與真實世界影像中之標誌辨識)
07/2011	黃朝琴	News Story Clustering with Bag of Word Model and Affinity Propagation (基於袋字模型及親和性互動演算法之新聞報導分群)
07/2011	楊子旻	Product Quantization for Video Copy Detection and News Topic Tracking (乘積量化應用於複製影片偵測與新聞主題追蹤)
07/2011	李承融	Video Scene Detection and Tagging by Social Media Analysis (利用社群媒體分析於場景偵測及標註)
07/2011	曾聖鈞	GPU-Accelerated Scene Categorization under Multiscale Category-Specific Visual Word Strategy (使用 GPU 加速多尺度特定類別視覺辭彙策略下之場景分群)
07/2010	蔡明宏	Mining Frequent Spatial Feature Configurations for Architecture Image Classification and Produce Image Retrieval (頻繁空間特徵結構探勘應用於建築物影像分類及商品影像檢索)
07/2010	莊柏祺	Video Copy Detection Based on Bag of Trajectory and Two-Level Approximate Sequence Matching (基於軌跡袋字模型與兩階段近似序列比對於複製影片偵測)
07/2010	蔡尚穎	On Correlating Dance Video with Music Based on Rhythm Information (基於節奏資訊分析跳舞影片與音樂之關連)
07/2010	李孟倫	Score Following and Retrieval Based on Sequence Matching and Chromagram Representation (基於序列比對與色譜表現的樂譜追蹤與檢索)
07/2010	劉文龍	Object Class Invariant Model for Age Estimation and Gender Classification in Pose Variant and Occluded Faces (物件類別不動量模型應用於不同姿勢與遮蔽下之人臉年齡估計及性別分類)
07/2009	林哲正	Using Cross-Media Correlation for Travel Media Analysis (利用跨媒體關聯性於旅遊媒體分析)
07/2009	洪建達	Clothes Segmentation in Consumer Photos by Using Common Information (使用共同資訊於消費性照片中之衣服區域切割)
06/2009	蔡文河	Modeling Spatiotemporal Relationship between Moving Objects for Sports Event Tactics

		Analysis (利用移動物體的時間-空間模型分析運動影片事件戰術)
06/2009	李亞霖	Visual Language Model for Face Clustering in Consumer Photos (使用視覺語言模型於消費型照片中進行人臉分群)
06/2009	林家弘	Consumer Photo Management and Browsing Facilitated by Near-Duplicate Detection with Feature Filtering (利用加入特徵過濾的相似偵測來幫助管理及瀏覽消費型照片)

15.3 Undergraduate Students

2024：戚瑞豐、李達安、林聖隆、王冠章

2023：林宸顛、楊懷甯、李星辰、蕭鈺蓁、李宇翔、呂奕宸

2022：王碩輔、林彥廷、陳宣璋、葉權葦

2021：何勁廷、洪峻和、陳宥翔、劉誠量

2020：何羽晴、陳韋杰、陳舜寧、黃宇衡、黃冠倫

2019：吳岳高、宋奕儒、林煒博、劉安倫

2019：吳瓊燃、林威辰、黃伯丞、楊晴晴

2018：林佳萱、張緯丞、曹維廷、廖蕙萍、陳坤鈿、陳昶均、陳峻煜、童彥淇

2017：陳雅暄、吳宛臻、李晨維、曾俊宏

2016：蔡呈佑、陳品翰、段伯陞、黃詩涵、田振宇、楊瑀婕、洪越嶺、李佳祥

2014：方國威、洪偉翔、黃聖理、宋東育、許博智

2013：周哲璋、高林立、張書堯、郭怡珠、陳亮元、賴宏暉

2012：蕭凡凱、林思岑、林仕鑫、陳弘毅

2011：黃正宇、游家祥、紀柏豪、徐漢農、郭冠廷

2010：張豐麒、黃俊璋、何秉軒

2009：邱耕毫

2008：游振威、謝宜婷、曾翊寧、江國睿、高立威、許斌聖

15.4 Interns

2019: 孟杉杉, Humboldt-Universität zu Berlin, Germany

2019: Soumya Chatterjee, Indian Institute of Technology Bombay, India

2017: Puripatt Phanpao, King Mongkut's University of Technology North Bangkok, Thailand

2016: 遠藤麗花, Hokkaido University, Japan

2016: Franziska Boenisch, Freie Universität Berlin, Germany

2016: Annick Volcy, Ecole Nationale Supérieure d'Ingenieur de Caen, France

2015: Jian Hao Loo, Universiti Putra Malaysia, Malaysia

2015: Marc Aurel Vischer, University Osnabruck, Germany

2014: Takahiro Inatsuki, Hokkaido University, Japan

16. Professional Services

中華民國人工智慧學會理事, 2023~

台灣多媒體智慧創新應用學會常務理事, 2021~

中華民國人工智慧學會秘書長, 2021~2022

台灣智慧技術協會理事, 2019~

中華民國影像處理與圖形識別學會理事, 2018~

科技部工程技術研究發展司智慧計算學門複審委員, 2018~2020、2023~

教育部公費留學考試命題及閱卷委員, 2016

教育部中小學教師專業發展整合平台, 資訊學科諮詢委員, 2011~2015

暨南國際大學校課程委員會諮詢委員, Aug. 2015 ~

暨南國際大學通識教育中心課程委員會委員, Aug. 2011 ~

暨南國際大學校長遴選委員, 2008

17. Oral Defense Committee Member

17.1 Doctoral Dissertations

- Lim Jian Han, University of Malaya, Nov. 2023.
- Sandy Ardianto, National Yang Ming Chiao Tung University, Dec. 2022.
- Kodikara Arachchillaya Saneera Hemantha Kulathilake, University of Malaya, Aug. 2022.
- Minh Tri Le, National Cheng Kung University, Jul. 2022.
- Nilotpal Sinha, National Yang Ming Chiao Tung University, Jul. 2022.
- Tan Jia Huei, University of Malaya, Dec. 2021.

- 楊惟中, National Cheng Kung University, Jul. 2020.

- 陳武黃, National Chung Cheng University, Oct. 2018.

- 陳予郎, National Chung Cheng University, Jul. 2016.

- 洪澄瑜, National Chung Cheng University, Nov. 2014.

- 鄭靜怡, National Chung Cheng University, Jul. 2014.

- 郭芳娥, National Chung Cheng University, May 2014.

- 蔡佳銘, National Chung Cheng University, May 2013.

- 張松露, National Chung Cheng University, Apr. 2013.

- 廖元勳, National Chung Cheng University, Mar. 2013.

- 許富淞, National Chung Cheng University, Jan. 2013.

- 林凱舜, National Chung Cheng University, Nov. 2012.

17.2 Master Theses

- 王柏鈞, National Cheng Kung University, Sep. 2023.
- 劉力元、張哲睿、顏安利, 林承冠, National Cheng Kung University, Jul. 2023.
- 王勇盛, 許宇韶, National Tsing Hua University, Jul. 2023.
- 陳劭寧, National Cheng Kung University, Jul. 2023.
- 高靖雯, Taipei Medical University, Jul. 2023.
- 林廷翰, 何名曜, 黃家茹, 王霽玄, 彭彥霖, National Central University, Jul. 2023.
- 郭育丞, National Cheng Kung University, Jul. 2023.
- 葉家任, 李易庭, National Cheng Kung University, Jun. 2023.
- 張鈺鈴, National Cheng Kung University, Jan. 2023.
- 邱怡華, National Yang Ming Chiao Tung University, Aug. 2022.
- Egor Poliakov, National Yang Ming Chiao Tung University, Jul. 2022.
- 徐永棚, 王承凱, 楊緣智, National Central University, Jul. 2022.
- 林晏廷, 彭盛暉, 陳珺安, 李萱, 林沆育, National Cheng Kung University, Jul. 2022.
- 黃貞棠, 陳彥合, 葉家福, National Taiwan Normal University, Jul. 2022.
- 張庭維, National Yang Ming Chiao Tung University, Nov. 2021.
- 洪浩祐, 林禎祥, National Cheng Kung University, Sep. 2021.
- 王佑安, National Chung Cheng University, Sep. 2021.
- 鄭惟中, National Cheng Kung University, Aug. 2021.

- 張世亞, 張耘愷, 蔡旻勳, 曾宏瑜, 李昀倫, National Chung Cheng University, Aug. 2021.
- 劉嘉翔, National Yang Ming Chiao Tung University, Jul. 2021.
- 李宗樺, 郭昆其, National Cheng Kung University, Jul. 2021.
- 王士杰, National Cheng Kung University, Jun. 2021.
- 張俊翔, National Cheng Kung University, Dec. 2020.
- 黃韋翔, 陳建豪, 陳彥名, National Chung Cheng University, Jul. 2020.
- 李道明, National Cheng Kung University, Jan. 2020.
- 張修齊, National Cheng Kung University, Jan. 2020.
- Huynh Van Su, National Chung Cheng University, Jul. 2019.
- Herman Prawiro, 李定家, 吳冠嫻, National Cheng Kung University, Jul. 2019.
- 江泓錫, 梁彥聰, National Cheng Kung University, Jul. 2019.
- 鄭雅文, 黃昌第, National Taiwan University, May 2019.
- 謝祥煒, National Chung Cheng University, Jan. 2019.
- 陳思穎, 王于青, 林天翼, 高滿馨, National Taiwan University, Jul. 2018.
- Duong Duy Chien, Nguyen Thanh Phat, 蕭瑋廷, 盧允中, 林仕杰, 王振翰, 林泰延、蔡宜伶, 阮青發, 楊惟戰, National Chung Cheng University, Jul. 2018.
- 鄭凱杰, 張振遠, 林季伯, 吳敏慈, National Cheng Kung University, Jul. 2018.
- 吳雨澄, 林杰鴻, 廖建棋, National Taiwan University, Jul. 2018.
- 宋東育, 賴怡辰, 蔡佳君, 陳政曄, National Chung Cheng University, Jul. 2017.
- 萬勃甫, 曾鵬峻, 賴致陸, 簡偉哲, National Chung Cheng University, Jul. 2017.

- 陳昱任, 林聖晏, 蔡釗仁, 王煥智, National Taiwan University, Jul. 2017
- 戴翊竹, 鍾明芬, National Cheng Kung University, Jul. 2017.
- 林彥廷, National Chung Cheng University, May 2017.
- 陳政德, 戴韻潔, National Chung Cheng University, Dec. 2016.
- 廖灝添, 王勇翔, 葉中璋, 李哲緯, National Cheng Kung University, Jun. 2016.
- 彭奕嘉, 林育辰, 鍾文藍, 江嫻書, National Taiwan University, Apr. 2016.
- 鄭蓋聲, 王鴻凱, 許翔宇, National Chung Cheng University, Jan. 2016.
- 吳家榮, 張偉毅, National Chung Cheng University, Jul. 2015.
- Tran Vu Hoang, National Chung Cheng University, Jun. 2015.
- 呂理銘, 賴韋利, 張嘉哲, National Chung Cheng University, Apr. 2015.
- 譚長洺, 陳易志, 黃啟承, National Chung Cheng University, Jan. 2015.
- 姚伯仰, 劉書承, 黃暉盛, National Chung Cheng University, Jul. 2014.
- 李竣穎, 翁蘇台, 蔡呈新, National Tsing Hua University, Jul. 2014.
- 王舜玄, 繆昕, 李明璋, 傅承堯, National Taiwan University, Jun. 2013.
- 連奕婷, 張宇蓓, 蔡明宏, National Taiwan University, May 2012.
- 張宜鶯, National Chung Cheng University, Nov. 2011.
- 宋育寰, 辜振禹, National Central University, Jul. 2011.
- 周瑋慈, 林弘偉, 曾翊寧, National Taiwan University, Jun. 2011.
- 黃勝揚, National Chung Cheng University, Jan. 2011.
- 林道榮, National Chung Cheng University, Dec. 2010.

- 莊純福, 洪嘉芬, National Chung Cheng University, Jul. 2010.
- 陳品果, 鄭淵太, 陳宏哲, National Kaohsiung First University, Jul. 2010.
- 劉文廣, 鍾幸夫, National Chung Cheng University, Nov. 2009.
- 林世民, 蔡欣明, National Kaohsiung First University, Jul. 2009.
- 林政憲, National Chung Cheng University, Jul. 2009.
- 黃彥霖, 顏芷妤, 林恆毅, 江明哲, National Taiwan University, Jun. 2009.
- 謝達繹, 謝秉諺, 王奕棠, 周辰威, National Taiwan University, Jun. 2008.
- 方劭彥, 林映孜, National Taiwan University, Jan. 2008.