Chia-Ming (Chris) Lee

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Google Scholar (Cited: 1,250+): https://scholar.google.com/citations?user=koBVaaUAAAAJ
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Affiliation / Experience

2025.12 – 2026.06 **Mandatory Military Service** Republic of China (Taiwan) Armed Forces

2025.07 – 2025.11 **Research Assistant** Computational Photography Lab (CPLAB), National Yang Ming Chiao Tung University
Advisor: Prof. *Yu-Lun Liu*

2023.02 – 2023.06 **Research Assistant** Advanced Computer Vision Lab (ACVLAB), National Cheng Kung University
Advisor: Prof. *Chih-Chung Hsu*

Education

2027.01 – **Ph.D., University at Albany, State University of New York (SUNY)** Department of Computer Science (incoming, Spring 2027).
Computer Vision and Machine Learning Lab (CVML Lab)
Advisors: Prof. *Ming-Ching Chang* and Prof. *Xin Li*

2023.09 – 2025.07 **Master, National Cheng Kung University** Institute of Data Science.
Thesis title: *Deep Origami Network: Folding and Unfolding Self-similarity for Image Super-resolution.*
Research Topics: Computer Vision, Image Processing, Information Forensics, Multimedia, Low-level Vision, Multi-modal Learning
Advisors: Prof. *Chih-Chung Hsu* and Prof. *Shuen-Lin Jeng*

2019.09 – 2023.06 **Bachelor, Fu Jen Catholic University** Statistics and Information Science.
Thesis title: *A Large Scale Whitebait Dataset for Long-tailed Distribution Image Classification and Domain Adaptation.*
Advisor: Prof. *Hao-Chiang Shao*

Awards and Achievements

CVPR 2026 **Computational Transparency Award**, for ELSA (CVPR Findings 2026).

NeurIPS 2026 **Distinguished Paper Award**, Workshop on Foundation Model Security (FLMSec), for ReplayMark.

ECCV 2026 **2nd place**, SEE-600K Challenge: Event-Guided Brightness Adjustment, Event-Based Multimodal Vision (EBMV) Workshop.

ECCV 2026 **4th place**, SEE-600K Challenge: Event-Guided Brightness Adjustment, Event-Based Multimodal Vision (EBMV) Workshop.

ECCV 2026 **2nd place**, Event-Guided Segmentation Challenge, Event-Based Multimodal Vision (EBMV) Workshop.

IJCAI 2026 **4th place**, DDL2.0 Deepfake Localization Challenge.

ICASSP 2025 **3rd place (3/136)**, Hyper-Object Challenge, Spectral Reconstruction from Mosaic Images.

ICASSP 2025 **3rd place (3/274)**, Hyper-Object Challenge, Joint Spatial and Spectral Super-Resolution.

BMVC 2025 **4th place (4/418)**, Data-Centric Land Cover Classification Challenge.

TIE Award 2025 **The Tech Innovation Excellence Award** (Spotlight – Top 10%).

CVGIP 2025 **Best Paper Award**, Conference on Computer Vision, Graphics, and Image Processing.

IPPR 2025 **Honorable Mention Award for Master's Thesis**, The Chinese Image Processing and Pattern Recognition Society.

ACMMM 2025 **Winner**, Soccer Track Challenge.

ICCV 2025 **Winner**, Multi-source COVID-19 Detection Challenge.

ACMMM 2025 **5th place**, Social Media Popularity Prediction Challenge.

ICRA 2025 **Winner**, TreeScope Lidar-based Tree Diameter Estimation Challenge.

CVPR 2025 **Winner (1/304)**, NTIRE Single Image Shadow Removal Challenge.

WACV 2024 **Runner-up**, USV-based Embedded Obstacle Segmentation Challenge, Maritime Computer Vision Workshop.

TIE Award 2024 **The Tech Innovation Excellence Award**.

ICPR 2024 **Winner**, Beyond Visible Spectrum: AI for Agriculture Challenge.

ACMMM 2024 **Top Performance Award**, Social Media Popularity Prediction Challenge.

CVPR 2024 **9th place (9/288)**, AI City Challenge Track 4: Road Object Detection in Fish-Eye Cameras.

CVPR 2024 **5th place (5/195)**, NTIRE 2024 Image Super-Resolution (x4).

CVPR 2024 **3rd place (3/21)**, COVID-19 Detection Challenge, Domain Adaptation, Explainability and Fairness in AI for Medical Image Analysis.

ICIP 2024 **Runner-up (2/1200+)**, Auto-WCEBleedGen Challenge Version V2.

2024 **Ministry of Education Presidential Education Award Candidate** in NCKU.

WACV 2024 **6th place (6/195)**, SeaDronesSee Multi-Object Tracking and Re-Identification Challenge, Workshop on Maritime Computer Vision (MaCVi).

MMAsia 2023 **5th place (5/195)**, Embedded AI Object Detection Model Design, PAIR-LITEON Competition.

SAS Hackathon 2023 **Gold Medal Award (1/150+)**.

ACMMM 2023 **Top Paper Award (3/700+)**, Social Media Popularity Prediction Challenge.

ICCV 2023 **Jury Prize (1/176)**, Visual Inductive Priors Workshop on Instance Segmentation Challenge.

ICASSP 2023 **Winner (1/18)**, COV19 Detection Challenge, AI-enabled Medical Image Analysis Workshop.

Scholarships

2024 Shanghai Commercial and Savings Bank Foundation Scholarship.

2023 International Competition Scholarship. Awarded by Fu Jen Catholic University.

2021 Zhang-Wang-Wei Foundation Scholarship. Awarded by Fu Jen Catholic University.

Industrial Project History

2024.07 – 2025.06 **Brake System Defect Detection.** Collaborated with Taiwan High-Speed Rail.

2024.04 – 2025.11 **Cybersecurity in Distributed Computing for Remote Sensing.** Collaborated with NVIDIA Taiwan Research.
Mentor: Fu-En Fred Yang

2024.03 – 2024.12 **AI Enhancing Substrate Manufacturing Yield with Optimized Process Factors.** Collaborated with Corporate R&D, Advanced Semiconductor Engineering Group (ASE).

2023.02 – 2024.01 **Substrate Drilling Scatter Plot Defect Detection.** Collaborated with Corporate R&D, Advanced Semiconductor Engineering Group (ASE).

Teaching Experience

Teaching Assistant, National Cheng Kung University

2025 Spring	Deep Learning.
2024 Fall	Machine Learning (DS6012).
2024 Fall	Fundamentals and Applications of Generative AI (CSIE4037).
2024 Spring	Deep Learning (DS6016).
2023 Fall	Statistical Methods for Analysis with Missing Data (STAT2004).
2023 Spring	Programming Language (STAT6060).

Academic Service

Conference Reviewer	ICLR27, AAAI27 (Program Committee), CVPR27, NeurIPS26, ECCV26, AAAI26, CVPR26, ICME26, ICLR25, ICCV25, ACMMM25, AAAI25, MMAsia25
Journal Reviewer	TMM, TIFS, TGRS, GRSL, JSTSP, TCSVT, IJPRAI
Workshop Reviewer	AICity26 (ECCV26), AICity25, AICity24, NTIRE24
Invited Talk	Experiences in Competitions and Challenges, National Taiwan University of Science and Technology. Invited by Prof. Tse-Yu Pan.

Research Publications

Journal Articles

[1] C.-M. Lee, C.-H. Cheng, Y.-F. Lin, Y.-C. Cheng, W.-T. Liao, C.-C. Hsu, F.-E. Yang, and Y.-C. F. Wang, "PromptHSI: Universal hyperspectral image restoration with vision-language modulated frequency adaptation," IEEE Transactions on Geoscience and Remote Sensing (TGRS), 2026.

[2] C.-Y. Lai, C.-Y. Jian, P.-C. Chuang, C.-M. Lee, C.-C. Hsu, C.-T. Hsu, and C.-W. Lin, "UMCL: Unimodal-generated multimodal contrastive learning for cross-compression-rate deepfake detection," International Journal of Computer Vision (IJCV), 2026.

[3] C.-C. Hsu, C.-Y. Jian, E.-S. Tu, C.-M. Lee, and G.-L. Chen, "Real-time compressed sensing for joint hyperspectral image transmission and restoration for CubeSat," IEEE Transactions on Geoscience and Remote Sensing (TGRS), vol. 62, pp. 1–16, 2024. doi: 10.1109/TGRS.2024.3378828.

Conference Proceedings

[1] C.-M. Lee, Y.-F. Lin, Y.-J. Hsiao, J.-H. Jiang, Y.-L. Liu, and C.-C. Hsu, "PhaSR: Generalized image shadow removal with physically aligned priors," IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2026.

[2] C.-M. Lee, Y.-F. Lin, J.-H. Jiang, Y.-J. Hsiao, C.-C. Hsu, and Y.-L. Liu, "ReflexSplit: Single image reflection separation via layer fusion-separation," IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2026.

[3] C.-C. Hsu, X.-D. Ma, W.-T. Liao, and C.-M. Lee, "ELSA: Exact linear-scan attention for fast and memory-light vision transformers," IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Findings, 2026. (CVPR 2026 Computational Transparency Award)

[4] C.-M. Lee, W.-H. Tsai, T. Y. Ying, and C.-C. Hsu, "ReplayMark: Probe-and-replay model-response watermarking for diffusion language models," NeurIPS 2026 Workshop on Foundation Model Security (FLMSec), 2026. (Distinguished Paper Award)

[5] C.-H. Cheng, J.-W. Lee, C.-M. Lee, and C.-C. Hsu, "WWE-UIE: A wavelet & white balance efficient network for underwater image enhancement," IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2026.

[6] C.-H. Cheng, Y.-F. Lin, C.-M. Lee, C.-C. Hsu, Y.-L. Shih, and C. Ting, "A multi-stage deep learning pipeline for crack detection and segmentation in high-speed rail brake discs," IEEE International Conference on Consumer Technology (ICCT-Pacific), 2025.

[7] R.-L. Jian, M.-C. Lo, C.-W. Huang, et al., "Tackling irregular motion and identity switching in fisheye camera for soccer multi-object tracking," ACM International Conference on Multimedia (ACM MM), 2025.

[8] C.-M. Lee, Y.-F. Lin, Y.-H. Ho, L.-W. Kang, and C.-C. Hsu, "HyFusion: Enhanced reception field transformer for hyperspectral image fusion," IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2025.

[9] C.-M. Lee, Y.-F. Lin, L.-W. Kang, and C.-C. Hsu, "Robust hyperspectral image panshapring via sparse spatial-spectral representation," IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 2025.

[10] C.-M. Lee, B.-C. Qiu, J.-T. Chen, Y.-F. Lin, Y.-S. Chou, and C.-C. Hsu, "Anchoring trends: Mitigating social media popularity prediction drift via feature clustering and expansion," ACM International Conference on Multimedia (ACM MM), 2025.

[11] C.-M. Lee, B.-C. Qiu, T.-Y. Chen, et al., "Taming domain shift in multi-source CT-scan classification via input-space standardization," IEEE/CVF International Conference on Computer Vision Workshops (ICCVW), 2025.

[12] Y.-F. Lin, C.-M. Lee, and C.-C. Hsu, "DenseSR: Image shadow removal as dense prediction," ACM International Conference on Multimedia (ACM MM), 2025.

[13] C.-C. Hsu, W.-H. Huang, W.-H. Tseng, M.-H. Wu, R.-J. Xu, and C.-M. Lee, "OmniDet: Omnidirectional object detection via fisheye camera adaptation," IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR), 2024, pp. 335–341.

[14] C.-C. Hsu and C.-M. Lee, "MISS: Memory-efficient instance segmentation for sport-scenes with visual inductive priors," IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR), 2024, pp. 557–561.

[15] C.-C. Hsu, C.-M. Lee, Y.-F. Chiang, et al., "A closer look at spatial-slice features learning for COVID-19 detection," IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), 2024, pp. 4924–4934.

[16] C.-C. Hsu, C.-M. Lee, and Y.-S. Chou, "DRCT: Saving image super-resolution away from information bottleneck," IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), 2024, pp. 6133–6142.

[17] C.-C. Hsu, C.-M. Lee, Y.-F. Lin, Y.-S. Chou, C.-Y. Jian, and C.-H. Tsai, "Revisiting vision-language features adaptation and inconsistency for social media popularity prediction," ACM International Conference on Multimedia (ACM MM), 2024, pp. 11464–11469.

[18] C.-C. Hsu, C.-M. Lee, P.-T. Yu, C.-J. Kang, C.-H. Sun, and K.-M. Wu, "Progressive alignment with VLM-LLM feature to augment defect classification for the ASE dataset," IEEE Asia Pacific Conference on Circuits and Systems (APCCAS), 2024.

[19] C.-C. Hsu, W.-H. Tseng, M.-H. Wu, C.-M. Lee, and W.-H. Huang, "Adapting object detection to fisheye cameras: A knowledge distillation with semi-pseudo-label approach," ACM International Conference on Multimedia in Asia (MMAsia), 2023.

[20] C.-C. Hsu, C.-Y. Jian, C.-M. Lee, C.-H. Tsai, and S.-C. Tai, "Bag of tricks of hybrid network for COVID-19 detection of CT scans," IEEE International Conference on Acoustics, Speech, and Signal Processing Workshops (ICASSPW), 2023, pp. 1–4.

[21] C.-C. Hsu, C.-M. Lee, X.-Y. Hou, and C.-H. Tsai, "Gradient boost tree network based on extensive feature analysis for popularity prediction of social posts," ACM International Conference on Multimedia (ACM MM), 2023, pp. 9451–9455.

References

Available on request (or refer to my co-authors on Google Scholar).