Yi-Wen Chen

Curriculum Vitae

☑ chenyiwena@gmail.com ② wenz116.github.io

Education

Ph.D. University of California, Merced, CA, USA.

2019 - 2024, Electrical Engineering and Computer Science

Vision and Learning Lab 1 link Advisor: Prof. Ming-Hsuan Yang

GPA: 4.0/4.0

Master of Science National Taiwan University, Taipei, Taiwan.

2017 - 2019, Communication Engineering

GPA: 3.98/4.30

Bachelor of Science National Taiwan University, Taipei, Taiwan.

2013 - 2017, Electrical Engineering

GPA: 3.85/4.30

Research Interests

Computer Vision and Deep Learning, with a primary focus on

∘ Vision-Language Models ∘ Generative AI ∘ Multimodal Learning ∘ Video Understanding

Publications (Google Scholar profile) (* equal contribution)

NeurIPS 2025 IllumiCraft: Unified Geometry and Illumination Diffusion for Controllable Video Generation.

Yuanze Lin, <u>Yi-Wen Chen</u>, Yi-Hsuan Tsai, Ronald Clark, and Ming-Hsuan Yang Neural Information Processing Systems, 2025 **1** paper

arXiv 2024 Generalizable Entity Grounding via Assistance of Large Language Model.

Lu Qi*, <u>Yi-Wen Chen</u>*, Lehan Yang*, Tiancheng Shen, Xiangtai Li, Weidong Guo, Yu Xu, and Ming-Hsuan Yang 1 paper

CVPR 2024 Text-Driven Image Editing via Learnable Regions.

Yuanze Lin, <u>Yi-Wen Chen</u>, Yi-Hsuan Tsai, Lu Jiang, and Ming-Hsuan Yang IEEE Conference on Computer Vision and Pattern Recognition, 2024 **1** paper

IJCV 2022 Understanding Synonymous Referring Expressions via Contrastive Features.

<u>Yi-Wen Chen</u>, Yi-Hsuan Tsai, and Ming-Hsuan Yang International Journal of Computer Vision, 2022 **1** paper

WACV 2022 Video Salient Object Detection via Contrastive Features and Attention Modules.

<u>Yi-Wen Chen</u>, Xiaojie Jin, Xiaohui Shen, and Ming-Hsuan Yang IEEE Winter Conference on Applications of Computer Vision, 2022 **1** paper

NeurlPS 2021 End-to-end Multi-modal Video Temporal Grounding.

<u>Yi-Wen Chen</u>, Yi-Hsuan Tsai, and Ming-Hsuan Yang Neural Information Processing Systems, 2021 paper

ACCV 2020 Regularizing Meta-Learning via Gradient Dropout.

Hung-Yu Tseng*, $\underline{\text{Yi-Wen Chen}}$ *, Yi-Hsuan Tsai, Sifei Liu, Yen-Yu Lin, and Ming-Hsuan Yang Asian Conference on Computer Vision, 2020 \blacksquare paper

IJCV 2020 VOSTR: Video Object Segmentation via Transferable Representations.

<u>Yi-Wen Chen</u>, Yi-Hsuan Tsai, Yen-Yu Lin, and Ming-Hsuan Yang International Journal of Computer Vision, 2020 **1** paper

BMVC 2019 Referring Expression Object Segmentation with Caption-Aware Consistency.

<u>Yi-Wen Chen</u>, Yi-Hsuan Tsai, Tiantian Wang, Yen-Yu Lin, and Ming-Hsuan Yang British Machine Vision Conference, 2019 **1** paper

ACCV 2018 Unseen Object Segmentation in Videos via Transferable Representations.

Oral Yi-Wen Chen, Yi-Hsuan Tsai, Chu-Ya Yang, Yen-Yu Lin, and Ming-Hsuan Yang Asian Conference on Computer Vision, 2018 1 paper

Best Student Paper Honorable Mention

Research and Work Experience

Researcher **NEC Laboratories America**, San Jose, CA, USA.

- Oct. 2025 Present
- Manager: Manmohan Chandraker
- Project: Vision-Language Models

Postdoctoral **NEC Laboratories America**, San Jose, CA, USA.

- Scientist May 2025 Oct. 2025
 - Manager: Manmohan Chandraker
 - o Project: Open-Vocabulary Object Detection, Vision-Language Models

Research Intern Microsoft Research, Seattle, WA, USA.

- o Mar. 2023 Jun. 2023
- o Mentor: Yen-Chun Chen
- Project: Personalized Text-to-Video Generation

Student Researcher Google Research, Seattle, WA, USA.

- o May 2022 Dec. 2022
- Mentors: Boging Gong and Tianyi Zhou
- o Project: Curriculum Learning for Visual Continued Pretraining

Student Researcher Google Research, Mountain View, CA, USA.

- o Jan. 2022 May 2022
- Mentor: Lu Jiang
- o Project: Text-Driven Image Editing

Research Intern Snap Research, Santa Monica, CA, USA.

- o May 2021 Aug. 2021
- o Mentors: Hsin-Ying Lee, Jian Ren, and Sergey Tulyakov
- Project: Complex Scene Generation with Object-Centric Generators

Research Intern ByteDance Al Lab, Mountain View, CA, USA.

- May 2020 Dec. 2020
- Mentors: Xiaojie Jin and Xiaohui Shen
- Project: Video Saliency Detection

Research Intern ASUS Intelligent Cloud Services, Taipei, Taiwan.

- May 2019 Jul. 2019
- Mentors: Allen Kao and Cheng-Hsien Han
- Project: Pose-Guided Face Rotation

Research Assistant Computer Vision Lab, CITI Academia Sinica, Taipei, Taiwan.

- o Jun. 2017 Jun. 2019
- o Mentors: Yen-Yu Lin, Yi-Hsuan Tsai, and Ming-Hsuan Yang
- Project: Referring Expression Object Segmentation, Unseen Object Segmentation in Videos

Honors and Awards

Award CVPR Doctoral Consortium Award, CVPR, 2024.

Fellowship Graduate Dean's Dissertation Fellowship, UC Merced, 2024.

Fellowship Bobcat Fellowship, UC Merced, 2021, 2022.

Fellowship Fred and Mitzie Ruiz Fellowship, UC Merced, 2021, 2022.

Award Best Student Paper Honorable Mention, ACCV 2018.

For our work "Unseen Object Segmentation in Videos via Transferable Representations"

Professional Activities

- Journal Reviewer International Journal of Computer Vision (IJCV)
 - IEEE Transactions on Image Processing (TIP)

- Conference IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021, 2022, 2023, 2024
 - IEEE International Conference on Computer Vision (ICCV), 2021, 2023
 - European Conference on Computer Vision (ECCV), 2022, 2024
 - Neural Information Processing Systems (NeurIPS), 2024, 2025
 - o IEEE Winter Conference on Applications of Computer Vision (WACV), 2020, 2022, 2023, 2025
 - International Joint Conference on Artificial Intelligence (IJCAI), 2021, 2023
 - AAAI Conference on Artificial Intelligence (AAAI), 2021, 2022
 - o IEEE International Conference on Advanced Video and Signal-based Surveillance (AVSS), 2019

Teaching Experience

Teaching Assistant EECS, University of California, Merced.

- CSE 015: Discrete Mathematics (Spring 2022)
- CSE 106: Exploratory Computing (Fall 2021)
- CSE 185: Introduction to Computer Vision (Spring 2021)
- CSE 015: Discrete Mathematics (Fall 2020)
- CSE 031: Computer Organization (Spring 2020)
- CSE 020: Introduction to Computing (Fall 2019)

Skills

Programming Python, C++, Java

Frameworks PyTorch, TensorFlow, JAX

Tools Git, Docker, Linux/Unix, MATLAB

References

Ph.D. Advisor Ming-Hsuan Yang, Professor, University of California, Merced, CA, USA.

mhyang@ucmerced.edu 1 homepage

Research Mentor Yi-Hsuan Tsai, Co-Founder and CTO, Atmanity, CA, USA.

wasidennis@gmail.com l homepage

Research Advisor Yen-Yu Lin, Professor, National Yang Ming Chiao Tung University, Hsinchu, Taiwan.

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