

Yi-Wen Chen

Curriculum Vitae

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Education

- Ph.D. **University of California, Merced, CA, USA.**
2019 – 2024, Electrical Engineering and Computer Science
Vision and Learning Lab [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, [Yi-Wen Chen](#), Yi-Hsuan Tsai, Ronald Clark, and Ming-Hsuan Yang
Neural Information Processing Systems, 2025 [paper](#)
- arXiv 2024 **Generalizable Entity Grounding via Assistance of Large Language Model.**
Lu Qi*, [Yi-Wen Chen](#)*, Lehan Yang*, Tiancheng Shen, Xiangtai Li, Weidong Guo, Yu Xu, and Ming-Hsuan Yang [paper](#)
- CVPR 2024 **Text-Driven Image Editing via Learnable Regions.**
Yuanze Lin, [Yi-Wen Chen](#), Yi-Hsuan Tsai, Lu Jiang, and Ming-Hsuan Yang
IEEE Conference on Computer Vision and Pattern Recognition, 2024 [paper](#)
- IJCV 2022 **Understanding Synonymous Referring Expressions via Contrastive Features.**
[Yi-Wen Chen](#), Yi-Hsuan Tsai, and Ming-Hsuan Yang
International Journal of Computer Vision, 2022 [paper](#)
- WACV 2022 **Video Salient Object Detection via Contrastive Features and Attention Modules.**
[Yi-Wen Chen](#), Xiaojie Jin, Xiaohui Shen, and Ming-Hsuan Yang
IEEE Winter Conference on Applications of Computer Vision, 2022 [paper](#)
- NeurIPS 2021 **End-to-end Multi-modal Video Temporal Grounding.**
[Yi-Wen Chen](#), Yi-Hsuan Tsai, and Ming-Hsuan Yang
Neural Information Processing Systems, 2021 [paper](#)
- ACCV 2020 **Regularizing Meta-Learning via Gradient Dropout.**
Hung-Yu Tseng*, [Yi-Wen Chen](#)*, Yi-Hsuan Tsai, Sifei Liu, Yen-Yu Lin, and Ming-Hsuan Yang
Asian Conference on Computer Vision, 2020 [paper](#)
- IJCV 2020 **VOSTR: Video Object Segmentation via Transferable Representations.**
[Yi-Wen Chen](#), Yi-Hsuan Tsai, Yen-Yu Lin, and Ming-Hsuan Yang
International Journal of Computer Vision, 2020 [paper](#)
- BMVC 2019 **Referring Expression Object Segmentation with Caption-Aware Consistency.**
[Yi-Wen Chen](#), Yi-Hsuan Tsai, Tiantian Wang, Yen-Yu Lin, and Ming-Hsuan Yang
British Machine Vision Conference, 2019 [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 [paper](#)
Best Student Paper Honorable Mention

Research and Work Experience

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

- Scientist
- May 2025 – Present
 - Manager: Manmohan Chandraker
 - Project: Open-Vocabulary Object Detection, Vision-Language Models

Research Intern **Microsoft Research**, Seattle, WA, USA.

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

Student Researcher **Google Research**, Seattle, WA, USA.

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

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

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

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

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

Research Intern **ByteDance AI 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.

- Jun. 2017 – Jun. 2019
- 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 Reviewer
- 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
 - 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
 - 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 [🌐 homepage](#)
- Research Mentor **Yi-Hsuan Tsai**, *Co-Founder and CTO*, Atmanity, CA, USA.
✉ wasidennis@gmail.com [🌐 homepage](#)
- Research Advisor **Yen-Yu Lin**, *Professor*, National Yang Ming Chiao Tung University, Hsinchu, Taiwan.
✉ lin@cs.nctu.edu.tw [🌐 homepage](#)