Yi-Wen Chen

Curriculum Vitae

✓ ychen319@ucmerced.edu
✓ 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
- Foundation Models

■ Publications (Google Scholar profile) (* equal contribution)

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

NeurIPS 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 **1** paper

ACCV 2020 Regularizing Meta-Learning via Gradient Dropout.

Hung-Yu Tseng*, <u>Yi-Wen Chen</u>*, Yi-Hsuan Tsai, Sifei Liu, Yen-Yu Lin, and Ming-Hsuan Yang Asian Conference on Computer Vision, 2020 **1** 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 i 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

Research Intern Microsoft Research, Seattle, WA, USA.

- o 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
- o 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
- o 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
- o Project: Video Saliency Detection

Research Intern ASUS Intelligent Cloud Services, Taipei, Taiwan.

- o May 2019 Jul. 2019
- Mentors: Allen Kao and Cheng-Hsien Han
- o 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
 - o IEEE International Conference on Computer Vision (ICCV), 2021, 2023 Reviewer
 - European Conference on Computer Vision (ECCV), 2022, 2024
 - IEEE Winter Conference on Applications of Computer Vision (WACV), 2020, 2022, 2023, 2025
 - International Joint Conference on Artificial Intelligence (IJCAI), 2021, 2023
 - o 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 l homepage

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

₱ lin@cs.nctu.edu.tw 1 homepage