

Research Interests

My research interests lie in **computer vision** and **deep learning**.

- Video Object Segmentation
- Representation Learning
- Vision and Language

Education

- 2019 – Present **Ph.D. Student**, *University of California, Merced, CA, USA*.
Electrical Engineering and Computer Science
Vision and Learning Lab [📄 link](#)
Advisor: Prof. Ming-Hsuan Yang
- 2017 – 2019 **Master of Science**, *National Taiwan University, Taipei, Taiwan*.
Communication Engineering
GPA: 3.98/4.30
- 2013 – 2017 **Bachelor of Science**, *National Taiwan University, Taipei, Taiwan*.
Electrical Engineering
GPA: 3.85/4.30

Publications

- IJCV 2019 **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, 2019
- BMVC 2019 **Referring Expression Object Segmentation with Caption-Aware Consistency**.
[Yi-Wen Chen](#), Tiantian Wang, Yi-Hsuan Tsai, Yen-Yu Lin, and Ming-Hsuan Yang
British Machine Vision Conference, 2019
- ACCV 2018 **Unseen Object Segmentation in Videos via Transferable Representations**.
[Yi-Wen Chen](#), Yi-Hsuan Tsai, Chu-Ya Yang, Yen-Yu Lin, and Ming-Hsuan Yang
Asian Conference on Computer Vision, 2018 **Oral Presentation**

Research Experiences

Computer Vision Lab, CITI Academia Sinica, Taipei, Taiwan

- Jun. 2017 **Research Assistant**.
– Present Advisor: Dr. Yen-Yu Lin [📄 link](#), Dr. Yi-Hsuan Tsai [📄 link](#), Prof. Ming-Hsuan Yang [📄 link](#)

Referring Expression Object Segmentation.

- Developed the spatial-aware dynamic filters to bridge the visual and language domains for referring expression object segmentation.
- Proposed an end-to-end trainable network for joint referring expression comprehension and generation via caption-aware consistency.
- Paper is accepted to **BMVC 2019**.

Unseen Object Segmentation in Videos via Transferable Representations.

- Developed a self-supervised learning framework to transfer knowledge from seen objects in images to unseen objects in videos.
- Paper is accepted to **ACCV 2018**.

Awards

- Dec. 2018 **Best Student Paper Award Honorable Mention, ACCV 2018**.
For our work “Unseen Object Segmentation in Videos via Transferable Representations”

Selected Courses

- Machine Learning and Having it Deep and Structured
- Deep Learning for Computer Vision
- Computer Vision
- Digital Visual Effects
- Digital Speech Processing
- Advanced Digital Signal Processing
- Time-Frequency Analysis and Wavelet Transform
- Algorithms

Skills

Programming C/C++, Python, MATLAB

Toolkit PyTorch, Keras, Caffe