Yi-Wen Chen

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 1 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.

<u>Yi-Wen Chen</u>, 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.

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

ACCV 2018 Unseen Object Segmentation in Videos via Transferable Representations.

<u>Yi-Wen Chen</u>, 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 1 link, Dr. Yi-Hsuan Tsai 1 link, Prof. Ming-Hsuan Yang 1 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

 $\begin{array}{cccc} \mathsf{Programming} & \mathsf{C}/\mathsf{C}{++}, \ \mathsf{Python}, \ \mathsf{MATLAB} \\ & \mathsf{Toolkit} & \mathsf{PyTorch}, \ \mathsf{Keras}, \ \mathsf{Caffe} \end{array}$