Yi-Wen Chen

Curriculum Vitae

311 Science and Engineering Building 2

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☐ wenz116.github.io

Research Interests

My research interests lie in computer vision and deep learning.

○ Video Object Segmentation
 ○ Representation Learning
 ○ Vision and Language

Education

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

2019 - Present, Electrical Engineering and Computer Science

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

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

Publications

Submitted to A Paper on Meta-Learning.

ACCV 2020 Hung-Yu Tseng, Yi-Wen Chen, Yi-Hsuan Tsai, Sifei Liu, Yen-Yu Lin, and Ming-Hsuan Yang

Asian Conference on Computer Vision, 2020

Submitted to A Paper on Referring Expression Comprehension.

NeurIPS 2020 Yi-Wen Chen, Yi-Hsuan Tsai, and Ming-Hsuan Yang

Neural Information Processing Systems, 2020

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.

 $\underline{\text{Yi-Wen Chen}}, \ \text{Yi-Hsuan Tsai}, \ \text{Tiantian Wang}, \ \text{Yen-Yu Lin}, \ \text{and Ming-Hsuan Yang}$

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 Best Student Paper Honorable Mention

Research and Work Experience

Research Intern ASUS Intelligent Cloud Services, Taipei, Taiwan.

May. 2019 - Jul. 2019

Mentor: Tai-Yi Huang, Allen Kao, and Cheng-Hsien Han

Project: Pose-Guided Face Rotation

 Developed a generative adversarial network (GAN) to generate yaw-rotated facial images based on facial landmarks.

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

Jun. 2017 - Jun. 2019

Advisor: Yen-Yu Lin, Yi-Hsuan Tsai, and Ming-Hsuan Yang

Project: 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.

Project: Unseen Object Segmentation in Videos

- Developed a self-supervised learning framework to transfer knowledge from seen objects in images to unseen objects in videos.
- Papers are accepted to ACCV 2018 and IJCV 2019.

Professional Activities

Conference Reviewer.

- o IEEE Winter Conference on Applications of Computer Vision (WACV), 2020
- o IEEE International Conference on Advanced Video and Signal-based Surveillance (AVSS), 2019

Honors and Awards

Dec. 2018 Best Student Paper Honorable Mention, ACCV 2018.

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

Teaching Experience

Teaching Assistant **EECS**, **University of California**, **Merced**.

- o CSE 020: Introduction to Computing [Java Programming] (Fall 2019)
- CSE 031: Computer Organization (Spring 2020)

Selected Courses

Machine Learning and Having it Deep and Structured
 Deep Learning for 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, TensorFlow, Keras, Caffe

References

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

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Research Mentor Yi-Hsuan Tsai, Research Scientist, NEC Laboratories America, CA, USA.

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

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