Yi-Wen Chen

Curriculum Vitae

Education

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

2019 - Present, Electrical Engineering and Computer Science

Vision and Learning Lab 1 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

Research Interests

My research interests lie in computer vision and deep learning.

Vision and Language
 Video Object Segmentation
 Representation Learning

Publications

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

ACCV 2020 Regularizing Meta-Learning via Gradient Dropout.

Hung-Yu Tseng*, <u>Yi-Wen Chen</u>* (* indicates equal contribution), Yi-Hsuan Tsai, Sifei Liu, Yen-Yu Lin, and Ming-Hsuan Yang

Asian Conference on Computer Vision, 2020

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

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 **Best Student Paper Honorable Mention**

Research and Work Experience

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

Research Intern ByteDance Al Lab, Mountain View, CA, USA.

May 2020 - Dec. 2020

Mentors: Xiaojie Jin, Xiaohui Shen, and Jianwei Li

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**

o 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

Mentors: 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.
- o 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 2020.

Honors and Awards

2021 Fred and Mitzie Ruiz Fellowship, University of California, Merced.

A campus-wide fellowship 1 link

Dec. 2018 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 International Conference on Computer Vision (ICCV), 2021
 - Reviewer International Joint Conference on Artificial Intelligence (IJCAI), 2021
 - o IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021
 - AAAI Conference on Artificial Intelligence (AAAI), 2021
 - IEEE Winter Conference on Applications of Computer Vision (WACV), 2020
 - IEEE International Conference on Advanced Video and Signal-based Surveillance (AVSS), 2019

Teaching Experience

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

- 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 [Java Programming] (Fall 2019)

Selected Courses

- Machine Learning and Having it Deep and Structured
 Deep Learning for Computer Vision
- o Digital Visual Effects o Digital Speech Processing o Advanced Digital Signal Processing

Skills

Programming Python, C/C++

Toolbox/Software PyTorch, TensorFlow, Caffe, MATLAB, OpenCV

References

Ph.D. Advisor **Ming-Hsuan Yang**, *Professor*, University of California, Merced, CA, USA. Myang@ucmerced.edu homepage

Research Mentor **Yi-Hsuan Tsai**, *Research Scientist*, NEC Laboratories America, CA, USA. wasidennis@gmail.com homepage

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

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