# Hsin-Ping Huang

## Curriculum Vitae

#### Education

2020 - Present **Ph.D. Student**, *University of California, Merced*, CA, USA.

Electrical Engineering and Computer Science, GPA: 4.0/4.0

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

2017 – 2020 Master of Science, The University of Texas at Austin, TX, USA.

Computer Science, GPA: 3.9/4.0

2013 – 2017 Bachelor of Science, National Taiwan University, Taipei, Taiwan.

Electrical Engineering, GPA: 4.2/4.3, rank: 3rd/166

#### Research Interests

Computer Vision, Machine Learning

#### **Publications**

CVPR 2023 Self-supervised AutoFlow.

<u>Hsin-Ping Huang</u>, Charles Herrmann, Junhwa Hur, Erika Lu, Kyle Sargent, Austin Stone, Ming-Hsuan Yang, Deqing Sun

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023

ECCV 2022 Adaptive Transformers for Robust Few-shot Cross-domain Face Anti-spoofing.

<u>Hsin-Ping Huang</u>, Deqing Sun, Yaojie Liu, Wen-Sheng Chu, Taihong Xiao, Jinwei Yuan, Hartwig Adam, Ming-Hsuan Yang

European Conference on Computer Vision (ECCV), 2022

ICCV 2021 Learning to Stylize Novel Views.

<u>Hsin-Ping Huang</u>, Hung-Yu Tseng, Saurabh Saini, Maneesh Singh, Ming-Hsuan Yang IEEE International Conference on Computer Vision (ICCV), 2021

ICASSP 2021 Unsupervised and Semi-Supervised Few-Shot Acoustic Event Classification.

Hsin-Ping Huang, Krishna C. Puvvada, Ming Sun, Chao Wang

IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2021

**ECCV 2020 Semantic View Synthesis**.

Hsin-Ping Huang, Hung-Yu Tseng, Hsin-Ying Lee, Jia-Bin Huang

European Conference on Computer Vision (ECCV), 2020

CoNLL 2019 Unsupervised Adversarial Domain Adaptation for Implicit Discourse Relation Classification.

Hsin-Ping Huang, Junyi Jessy Li

The SIGNLL Conference on Computational Natural Language Learning (CoNLL), 2019

## Research Experience

Jun. 2022 - Present Google Research, Seatle.

Student Researcher with Dr. Yu-Chuan Su

Novel view synthesis / video generation

Jan. 2022 - Nov. 2022 Google Research, Cambridge.

Student Researcher with Dr. Deging Sun, Dr. Charles Herrmann and Dr. Junhwa Hur

 Proposed Self-AutoFlow to learn to render a training set for optical flow using self-supervision on the target domain, connecting learning to render and self-supervised learning

May. 2021 – Dec. 2021 Google Research, Mountain View.

Research Intern with Dr. Deging Sun, Dr. Yaojie Liu and Dr. Wen-Sheng Chu

 Introduced ensemble adapters and feature transformation modules for vision transformers to achieve robust performance for cross-domain face anti-spoofing with a few samples

Aug. 2020 - Present Vision and Learning Lab, EECS, University of California, Merced.

Advisor: Prof. Ming-Hsuan Yang

 Tackled a 3D scene stylization problem that generates stylized images of a scene from arbitrary novel views given images at source views and a reference style image

May. 2020 – Aug. 2020 Amazon Alexa, Cambridge.

Research Intern with Dr. Krishna Puvvada, Dr. Ming Sun and Dr. Chao Wang

o Developed unsupervised/semi-supervised methods for few-shot acoustic event detection

Feb. 2019 – Mar. 2020 Vision and Learning Lab, ECE, Virginia Tech.

Advisor: Prof. Jia-Bin Huang

o Generated free-viewpoint rendering of a synthesized image given a semantic label map.

Feb. 2018 – Aug. 2018 Computational Discourse Lab, Linguistics, The University of Texas at Austin.

Advisor: Prof. Junyi Jessy Li

• Exploited explicit discourse relations to classify implicit relations without labels based on adversarial discriminative domain adaptation.

#### **Professional Activities**

Journal Reviewer Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2022

International Journal of Computer Vision (IJCV), 2022, 2023

Computer Vision and Image Understanding (CVIU), 2021

Computer Graphics Forum, 2021-2022

Conference Reviewer IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022, 2023

IEEE International Conference on Computer Vision (ICCV), 2021, 2023

European Conference on Computer Vision (ECCV), 2022

AAAI Conference on Artificial Intelligence (AAAI), 2023

International Joint Conference on Artificial Intelligence (IJCAI), 2023

#### **Awards**

Aug. 2022 ECCV Travel Award.

Feb. 2022 Meta PhD Research Fellowship Finalist.

AR/VR Human Understanding

Jun. 2017 Class Valedictorian, EE, National Taiwan University.

3rd place graduation (3/166)

2014 – 2016 **Presidential Award (4 times)**, EE, National Taiwan University.

Top 5% of students in one semester

## Teaching Experience

Aug. 2020 – May. 2022 EECS, University of California, Merced.

- CSE 031 Computer Organization (Fall 2021, Spring 2022)
- CSE 162 Mobile Computing (Spring 2021)
- CSE 120 Software Engineering (Fall 2020)

Aug. 2017 – May. 2020 CS, The University of Texas at Austin.

- o CS 303E Elements of Computers and Programming (Spring 2019, Fall 2019, Spring 2020)
- CS 329E Elements of Software Engineering (Fall 2018)
- CS 324E Elements of Graphics (Spring 2018)
- CS 331 Algorithms and Complexity (Fall 2017)

#### Technical Skills

Programming C/C++, Python

Toolbox / Software Pytorch, Tensorflow, Matlab, OpenCV

### References

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

Research Advisor Jia-Bin Huang, Research Scientist, Meta Reality Labs.

Research Mentor Hung-Yu Tseng, Research Scientist, Meta Reality Labs.

Internship Mentor **Deqing Sun**, Research Scientist, Google Research.

□ deqingsun@google.com □ homepage

Internship Mentor **Yu-Chuan Su**, Research Scientist, Google Research.