Hsin-Ping Huang

Curriculum Vitae

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⌂ hhsinping.github.io

━━━━━━ ## Education

Ph.D. Candidate	**University of California, Merced**
	2020 – Present, Electrical Engineering and Computer Science, GPA: 4.0/4.0
	Advisor: Prof. Ming-Hsuan Yang
	Thesis topic: novel view synthesis, video generation, optical flow
M.S.	**The University of Texas at Austin**
	2017 – 2020, Computer Science, GPA: 3.9/4.0
B.S.	**National Taiwan University**
	2013 – 2017, Electrical Engineering, GPA: 4.2/4.3, rank: 3rd/166

━━━━━━ ## Publications [Google Scholar profile]

In Submission — **Fine-grained Controllable Video Generation via Object Appearance and Context** [Project Page] [Paper]
Hsin-Ping Huang, Yu-Chuan Su, Deqing Sun, Lu Jiang, Xuhui Jia, Yukun Zhu, Ming-Hsuan Yang

In Submission — **Generating Long Videos via Effective Keyframes and Guidance**
Hsin-Ping Huang, Yu-Chuan Su, Ming-Hsuan Yang

CVPR 2023 — **Self-supervised AutoFlow** [Project Page] [Paper]
Hsin-Ping Huang, Charles Herrmann, Junhwa Hur, Erika Lu, Kyle Sargent, Austin Stone, Ming-Hsuan Yang, Deqing Sun

ECCV 2022 — **Adaptive Transformers for Robust Few-shot Cross-domain Face Anti-spoofing** [Project Page] [Paper]
Hsin-Ping Huang, Deqing Sun, Yaojie Liu, Wen-Sheng Chu, Taihong Xiao, Jinwei Yuan, Hartwig Adam, Ming-Hsuan Yang

ICCV 2021 — **Learning to Stylize Novel Views** [Project Page] [Paper]
Hsin-Ping Huang, Hung-Yu Tseng, Saurabh Saini, Maneesh Singh, Ming-Hsuan Yang

ICASSP 2021 — **Unsupervised and Semi-Supervised Few-Shot Acoustic Event Classification** [Paper]
Hsin-Ping Huang, Krishna C. Puvvada, Ming Sun, Chao Wang

ECCV 2020 — **Semantic View Synthesis** [Project Page] [Paper]
Hsin-Ping Huang, Hung-Yu Tseng, Hsin-Ying Lee, Jia-Bin Huang

CoNLL 2019 — **Unsupervised Adversarial Domain Adaptation for Implicit Discourse Relation Classification** [Paper]
Hsin-Ping Huang, Junyi Jessy Li

Awards

Mar. 2024   **Bobcat Fellowship**, University of California, Merced
Outstanding academic achievement

Aug. 2022   **ECCV Travel Award**

Feb. 2022   **Meta PhD Research Fellowship Finalist**
AR/VR Human Understanding [Webpage]

2014 – 2016   **Presidential Award (4 times)**, National Taiwan University
Top 5% academic achievement in one semester

Research Experience

Research Intern   **Adobe Research**, San Jose, CA
- Jun. 2024 – Present
- Mentor: Dr. Zhan Xu, Dr. Jimei Yang

Student Researcher   **Google Research**, Seattle, WA
- Jan. 2024 – May. 2024
- Mentor: Dr. Yu-Chuan Su, Dr. Hexiang (Frank) Hu, Dr. Kelvin Chan
- Project: factuality in text-to-image generation models.

Student Researcher   **Google Research**, Seattle, WA
- Apr. 2023 – Dec. 2023
- Mentor: Dr. Yu-Chuan Su, Dr. Deqing Sun, Dr. Lu Jiang
- Project: controllable video generation over objects' categories, locations, and appearances.

Student Researcher   **Google Research**, Seattle, WA
- Jun. 2022 – Mar. 2023
- Mentor: Dr. Yu-Chuan Su
- Project: generating long videos with different events specified by multiple guidance.

Student Researcher   **Google Research**, Cambridge, MA
- Jan. 2022 – Nov. 2022
- Mentor: Dr. Deqing Sun, Dr. Charles Herrmann and Dr. Junhwa Hur
- Project: learning to render a training set for optical flow using self-supervision.

Research Intern   **Google Research**, Mountain View, CA
- May. 2021 – Dec. 2021
- Mentor: Dr. Deqing Sun, Dr. Yaojie Liu and Dr. Wen-Sheng Chu
- Project: few-shot cross-domain face anti-spoofing using adapters and vision transformers.

Research Assistant   **Vision and Learning Lab**, University of California, Merced, CA
- Aug. 2020 – Apr. 2021
- Mentor: Dr. Hung-Yu Tseng, Dr. Maneesh Singh, Prof. Ming-Hsuan Yang
- Project: 3D scene stylization given images at source views and a reference style image.

Research Intern   **Amazon Alexa**, Cambridge, MA
- May. 2020 – Aug. 2020
- Mentor: Dr. Krishna Puvvada, Dr. Ming Sun and Dr. Chao Wang
- Project: unsupervised and semi-supervised learning for few-shot acoustic event detection.

Student Researcher   **Vision and Learning Lab**, Virginia Tech, VA
- Feb. 2019 – Mar. 2020
- Mentor: Prof. Jia-Bin Huang, Dr. Hung-Yu Tseng, Dr. Hsin-Ying Lee
- Project: generated free-viewpoint rendering of a synthesized image given a semantic map.

Student Researcher	**Computational Discourse Lab**, The University of Texas at Austin, TX
	○ Feb. 2018 – Aug. 2018
	○ Mentor: Prof. Junyi Jessy Li
	○ Project: classifying implicit discourse relations using adversarial 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, 2024
	AAAI Conference on Artificial Intelligence (AAAI), 2023, 2024
	International Joint Conference on Artificial Intelligence (IJCAI), 2023, 2024

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**
	○ 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
	✉ mhyang@ucmerced.edu [Homepage]
Research Advisor	**Jia-Bin Huang**, Associate Professor, University of Maryland, College Park
	✉ jbhuang@umd.edu [Homepage]
Research Mentor	**Hung-Yu Tseng**, Research Scientist, Meta Reality Labs
	✉ hytseng0509@gmail.com [Homepage]
Internship Mentor	**Deqing Sun**, Research Scientist, Google Research
	✉ deqing.sun@gmail.com [Homepage]
Internship Mentor	**Yu-Chuan Su**, Research Scientist, Google Research
	✉ ycsu@google.com [Homepage]