Hsin-Ping Huang

Curriculum Vitae

Education

Ph.D. Candidate University of California, Merced

2020 – Present, Electrical Engineering and Computer Science, GPA: 4.0/4.0 Advisor: Ming-Hsuan Yang

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

Research Interests

Deep Learning for Computer Vision

• Image, Video and 3D Generation and Manipulation • Optical Flow

Publications [Google Scholar profile]

arXiv 2024 Move-in-2D: 2D-Conditioned Human Motion Generation [Project Page] [Paper]
Hsin-Ping Huang, Yang Zhou, Jui-Hsien Wang, Difan Liu, Feng Liu, Ming-Hsuan Yang, Zhan Xu

arXiv 2024 KITTEN: A Knowledge-Intensive Evaluation of Image Generation on Visual Entities [Project Page] [Paper]

Hein Ping Huang, Vinyi Wang, Venatar Pitton, Hagai Taitalhaum, Cauray Singh Tamer, Ming

<u>Hsin-Ping Huang</u>, Xinyi Wang, Yonatan Bitton, Hagai Taitelbaum, Gaurav Singh Tomar, Ming-Wei Chang, Xuhui Jia, Kelvin C.K. Chan, Hexiang Hu, Yu-Chuan Su, Ming-Hsuan Yang

WACV 2025 Fine-grained Controllable Video Generation via Object Appearance and Context [Project Page] [Paper]

WACV 2025 Hsin-Ping Huang, Yu-Chuan Su, Deqing Sun, Lu Jiang, Xuhui Jia, Yukun Zhu, Ming-Hsuan Yang WACV 2025 Generating Long-take Videos via Effective Keyframes and Guidance [Paper]

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]

<u>Hsin-Ping Huang</u>, 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

Honors and 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

Research and Work Experience

Research Intern Adobe Research, San Jose, CA

- Jun. 2024 Nov. 2024
- o Mentor: Zhan Xu, Yang Zhou, Jui-Hsien Wang, Difan Liu, Feng Liu
- o Project: Human Video Generation

Student Researcher Google DeepMind, Seattle, WA

- Jan. 2024 May 2024
- o Mentor: Yu-Chuan Su, Hexiang (Frank) Hu, Kelvin Chan, Xinyi Wang
- o Project: Evaluation of Image Generation on Visual Entities

Student Researcher Google Research, Seattle, WA

- o Apr. 2023 Dec. 2023
- Mentor: Yu-Chuan Su, Deging Sun, Lu Jiang
- Project: Fine-grained Video Generation of Objects' Categories, Locations, and Appearances

Student Researcher Google Research, Seattle, WA

- Jun. 2022 Mar. 2023
- Mentor: Yu-Chuan Su, Ming-Hsuan Yang
- o Project: Long Video Generation with Different Events Specified by Multiple Guidance

Student Researcher Google Research, Cambridge, MA

- Jan. 2022 Nov. 2022
- o Mentor: Deqing Sun, Charles Herrmann, Junhwa Hur
- Project: Learning to Render Training Sets for Optical Flow in Unlabeled Domains

Research Intern Google Research, Mountain View, CA

- o May 2021 Dec. 2021
- Mentor: Deqing Sun, Yaojie Liu, Wen-Sheng (Vincent) Chu
- Project: Few-shot Cross-domain Face Anti-spoofing

Research Assistant Vision and Learning Lab, University of California, Merced, CA

- Aug. 2020 Apr. 2021
- Mentor: Hung-Yu Tseng, Maneesh Singh, Ming-Hsuan Yang
- Project: 3D Scene Stylization Given Images at Source Views and a Style Image

Research Intern Amazon Alexa, Cambridge, MA

- o May 2020 Aug. 2020
- o Mentor: Krishna Puvvada, Ming Sun, Chao Wang
- Project: Unsupervised and Semi-supervised Learning for Few-shot Acoustic Event Detection

Student Researcher Vision and Learning Lab, Virginia Tech, VA

o Feb. 2019 - Mar. 2020

- o Mentor: Jia-Bin Huang, Hung-Yu Tseng, Hsin-Ying Lee
- Project: Generating Free-viewpoint Rendering of Synthesized Images from Semantic Maps

Student Researcher Computational Discourse Lab, The University of Texas at Austin, TX

- Feb. 2018 Aug. 2018Mentor: Junyi Jessy Li
- Project: Classifying Implicit Discourse Relations Without Annotations

Professional Activities

Journal Reviewer O Computer Vision: TPAMI, IJCV, CVIU

Computer Graphics: Computer Graphics Forum

Conference Reviewer O Computer Vision: WACV'25, ACCV'24, ECCV'24, ICCV'23, CVPR'23, ECCV'22,

CVPR'22, ICCV'21

Machine Learning: ICLR'25, NeurIPS'24

Artificial Intelligence: IJCAI'24, AAAI'24, IJCAI'23, AAAI'23

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)

o CS 331 Algorithms and Complexity (Fall 2017)

Technical Skills

Programming C/C++, Python

Toolbox / Software Pytorch, Tensorflow, JAX, MATLAB, OpenCV

References

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

Internship Mentor Zhan Xu, Research Scientist, Adobe Research

Internship Mentor Deging Sun, Research Scientist, Google DeepMind

□ deqing.sun@gmail.com [Homepage]

Internship Mentor Yu-Chuan Su, Research Scientist, Google DeepMind

Research Advisor Jia-Bin Huang, Associate Professor, University of Maryland, College Park

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