# 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

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

### Publications [Google Scholar profile]

## In Submission KITTEN: A Knowledge-Intensive Evaluation of Image Generation on Visual Entities [Project Page] [Paper]

<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]

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]

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

#### 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

- o Jun. 2024 Present
- 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
- o Project: Fine-grained Video Generation of Objects' Categories, Locations, and Appearances

#### Student Researcher Google Research, Seattle, WA

- o 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

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

#### Research Intern Google Research, Mountain View, CA

- May 2021 Dec. 2021
- o Mentor: Deging 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

- o Aug. 2020 Apr. 2021
- o 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

- May 2020 Aug. 2020
- Mentor: Krishna Puvvada, Ming Sun, Chao Wang
- o 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

o Project: Classifying Implicit Discourse Relations Without Annotations

#### **Professional Activities**

Journal Reviewer O Computer Vision: TPAMI, IJCV, CVIU

Computer Graphics: Computer Graphics Forum

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

CVPR'22, ICCV'21

o 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

o CSE 031 Computer Organization (Fall 2021, Spring 2022)

o 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 Deqing 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