# Chun-Han (Hank) Yao

Curriculum Vitae

# Education

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

2019 - 2023, Electrical Engineering and Computer Science

Vision and Learning Lab 1 Advisor: Ming-Hsuan Yang

GPA: 4.0/4.0

Master of Science University of California, San Diego, CA, USA

2017 - 2019, Computer Science

overall GPA: 3.97/4.0

Bachelor of Science National Taiwan University, Taipei, Taiwan

2012 - 2016, Electrical Engineering

major GPA: 4.17/4.3

#### **Publications**

ECCV 2024 SV3D: Novel Multi-view Synthesis and 3D Generation from a Single Image using Latent Video Diffusion [page]

Vikram Voleti\*, <u>Chun-Han Yao\*</u>, Mark Boss\*, Adam Letts, David Pankratz, Dmitry Tochilkin, Christian Laforte, Robin Rombach, Varun Jampani\* (\*core contributions) European Conference on Computer Vision (ECCV), 2023

NeurIPS 2023 ARTIC3D: Learning Robust Articulated 3D Shapes from Noisy Web Image Collections [page]

<u>Chun-Han Yao</u>, Amit Raj, Wei-Chih Hung, Yuanzhen Li, Michael Rubinstein, Ming-Hsuan Yang, Varun Jampani

Neural Information Processing Systems (NeurIPS), 2023

CVPR 2023 Hi-LASSIE: High-Fidelity Articulated Shape and Skeleton Discovery from Sparse Image Ensemble [page]

<u>Chun-Han Yao</u>, Wei-Chih Hung, Yuanzhen Li, Michael Rubinstein, Ming-Hsuan Yang, Varun Jampani Conference on Computer Vision and Pattern Recognition (CVPR), 2023

NeurIPS 2022 LASSIE: Learning Articulated Shapes from Sparse Image Ensemble via 3D Part Discovery [page]

<u>Chun-Han Yao</u>, Wei-Chih Hung, Yuanzhen Li, Michael Rubinstein, Ming-Hsuan Yang, Varun Jampani Neural Information Processing Systems (NeurIPS), 2022

ECCV 2022 Learning Visibility for Robust Dense Human Body Estimation (VisDB) [page]

<u>Chun-Han Yao</u>, Jimei Yang, Duygu Ceylan, Yi Zhou, Yang Zhou Ming-Hsuan Yang European Conference on Computer Vision (ECCV), 2022

WACV 2022 Federated Multi-target Domain Adaptation (DualAdapt) [paper]

<u>Chun-Han Yao</u>, Boqing Gong, Yin Cui, Hang Qi, Yukun Zhu, Ming-Hsuan Yang Winter Conference on Applications of Computer Vision (WACV), 2022

ICCV 2021 Discovering 3D Parts from Image Collections [page]

Chun-Han Yao, Wei-Chih Hung, Varun Jampani, Ming-Hsuan Yang

International Conference on Computer Vision (ICCV), 2021

#### ECCV 2020 Video Object Detection via Object-level Temporal Aggregation [paper]

<u>Chun-Han Yao</u>, Chen Fang, Xiaohui Shen, Yangyue Wan, Ming-Hsuan Yang European Conference on Computer Vision (ECCV), 2020

# WACV 2020 Progressive Domain Adaption for Object Detection [github]

Han-Kai Hsu, <u>Chun-Han Yao</u>, Yi-Hsuan Tsai, Wei-Chih Hung, Hung-Yu Tseng, Maneesh Singh, Ming-Hsuan Yang

Winter Conference on Applications of Computer Vision (WACV), 2020

# ACMMM 2017 Occlusion-aware Video Temporal Consistency [paper]

<u>Chun-Han Yao</u>, Chia-Yang Chang, Shao-Yi Chien ACM Multimedia (MM), 2017

#### ICME 2016 Example-based Video Color Transfer [paper]

Chun-Han Yao, Chia-Yang Chang, Shao-Yi Chien

IEEE International Conference on Multimedia and Expo (ICME), 2016

# Research and Work Experience

#### Research Scientist Stability AI, CA, USA

- o Jan. 2024 Present
- Manager: Varun Jampani
- o Project: SV3D, 4D generation

#### Research Scientist Reality Labs Research (Meta), Sausalito, CA, USA

Intern • Jun. 2023 - Oct. 2024

- Mentors: Tony Tung, Nikolaos Sarafianos
- Project: Reconstructing Clothed Human Body from Monocular RGBD Images

# Student Researcher Google Research, Mountain View, CA, USA

- o Feb. 2022 Jun. 2023
- Mentor: Varun Jampani
- Project: 3D Articulated Shapes from Sparse Image Ensemble (LASSIE, Hi-LASSIE, ARTIC3D)

#### Research Intern Adobe Research, San Jose, CA, USA

- o Mar. 2021 Jan. 2022
- Mentor: Jimei Yang
- Project: Learning Visibility for Robust Dense Human Body Estimation (VisDB)

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

- o Mar. 2020 Mar. 2021
- Mentor: Boging Gong
- o Project: Federated Multi-target Domain Adaptation (DualAdapt)

#### Research Intern Bytedance Al Lab, Palo Alto, CA, USA

- o Mar. 2019 Aug. 2019
- Mentors: Xiaohui Shen, Chen Fang, Yangyue Wan
- Project: Real-time Video Object Detection by Tracking

#### Research Assistant CSE, University of California, San Diego, CA, USA

- o Mar. 2018 Dec. 2018
- o Advisor: Manmohan Chandraker
- o Project: 3D Reconstruction for Defect Detection via Generative Adversarial Networks

# Software Engineer Verizon Media (Oath/Yahoo), Sunnyvale, CA, USA

- Intern Jun. 2018 Sep. 2018
  - Mentors: Sridharan P, Umang Patel
  - Projects: Content Extraction from Images (Coupon Detection, Optical Character Recognition, Name Entity Recognition)

Research Assistant CSE, University of California, San Diego, CA, USA

o Sep. 2017 - Jun. 2018

Advisor: Chung-Kuan Cheng

o Projects: BCG and fMRI Brain Image Analysis, System Power Optimization

Research Intern DT42, Taipei, Taiwan

o Apr. 2017 - Aug. 2017

o Project: Object Detection for Video Surveillance Systems (YOLO, Faster-RCNN)

Research Assistant EE, National Taiwan University, Taipei, Taiwan

Feb. 2015 – Sep. 2016Advisor: Shao-Yi Chien

Projects: Video Temporal Consistency, Video Color Transfer

Research Assistant MediaTek, Taipei, Taiwan

• Aug. 2015 – Sep. 2016

Advisor: Hung-Yu Wei

Project: Scheduling and Power Allocation for Millimeter-wave Mobile Wireless Networks

Honors and Awards

Fellowship Graduate Student Opportunity Program Fellowship, UC Merced, Aug. 2022

Top 2 research achievement

Fellowship Bobcat Fellowship, UC Merced, Jan. 2022

Outstanding academic achievement

Award Undergraduate Innovation Award, EE, National Taiwan University, Jun. 2016

Top 3 research projects

Award Presidential Award, National Taiwan University, Jan. 2009, Jun. 2009

Top 5% in the department

Teaching Experience

Teaching Assistant **EECS, University of California**, Merced, CA, USA

o CSE 185: Introduction to Computer Vision (Spring 2021)

CSE 005: Introduction to Computer Applications (Fall 2020)

• CSE 140: Computer Architecture (Spring 2020)

o CSE 020: Introduction to Computing [Java Programming] (Fall 2019)

Technical Skills

Programming Proficient (10+ years) in Python

Familiar (3+ years) with C++, Java, JavaScript, R, Verilog

Toolbox/Software PyTorch, TensorFlow, MATLAB, OpenCV, Spark, LabVIEW

Hardware FPGA, Arduino, USRP

References

Manager Varun Jampani, Lead Researcher, Stability Al

□ varunjampani@gmail.com 
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Ph.D. Advisor Ming-Hsuan Yang, Professor, University of California, Merced

Internship Mentor Jimei Yang, Research Scientist, Adobe

Internship Mentor Boqing Gong, Research Scientist, Google

⋈ boqinggo@outlook.com 🗓

Internship Mentor Chen Fang, Research Scientist, Bytedance Al Lab

□ fangchen@bytedance.com 
□

Research Advisor Manmohan Chandraker, Professor, University of California, San Diego

Research Advisor Shao-Yi Chien, Professor, National Taiwan University