Chun-Han (Hank) Yao

Curriculum Vitae

✆ +1-858-242-9517
✉ cyao6@ucmerced.edu
⌨ chhankyao.github.io

Education

Ph.D.	**University of California, Merced**, CA, USA
	2019 – 2023, Electrical Engineering and Computer Science
	Vision and Learning Lab ⓘ
	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
---

arXiv 2024 **SV4D: Dynamic 3D Content Generation with Multi-Frame and Multi-View Consistency [page]**
Yiming Xie*, <u>Chun-Han Yao*</u>, Vikram Voleti, Huaizu Jiang, Varun Jampani (*equal contributions)
arXiv preprint, 2024

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), 2024

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]
	<u>Chun-Han Yao</u>, 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]
	<u>Chun-Han Yao</u>, 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
	○ Jan. 2024 – Present
	○ Manager: Varun Jampani
	○ Project: SV3D, 4D generation
Research Scientist Intern	**Reality Labs Research (Meta)**, Sausalito, CA, USA
	○ 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
	○ 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
	○ 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
	○ Mar. 2020 – Mar. 2021
	○ Mentor: Boqing Gong
	○ Project: Federated Multi-target Domain Adaptation (DualAdapt)
Research Intern	**Bytedance AI Lab**, Palo Alto, CA, USA
	○ 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
	○ Mar. 2018 – Dec. 2018
	○ Advisor: Manmohan Chandraker
	○ Project: 3D Reconstruction for Defect Detection via Generative Adversarial Networks

Software Engineer Intern	**Verizon Media (Oath/Yahoo)**, Sunnyvale, CA, USA
	○ 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
	○ Sep. 2017 – Jun. 2018
	○ Advisor: Chung-Kuan Cheng
	○ Projects: BCG and fMRI Brain Image Analysis, System Power Optimization
Research Intern	**DT42**, Taipei, Taiwan
	○ Apr. 2017 – Aug. 2017
	○ Project: Object Detection for Video Surveillance Systems (YOLO, Faster-RCNN)
Research Assistant	**EE, National Taiwan University**, Taipei, Taiwan
	○ Feb. 2015 – Sep. 2016
	○ Advisor: 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
	○ CSE 185: Introduction to Computer Vision (Spring 2021)
	○ CSE 005: Introduction to Computer Applications (Fall 2020)
	○ CSE 140: Computer Architecture (Spring 2020)
	○ 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 AI
	✉ varunjampani@gmail.com 🛈

Ph.D. Advisor	**Ming-Hsuan Yang**, *Professor*, University of California, Merced
	✉ mhyang@ucmerced.edu [i]
Internship Mentor	**Jimei Yang**, *Research Scientist*, Adobe
	✉ jimyang@adobe.com [i]
Internship Mentor	**Boqing Gong**, *Research Scientist*, Google
	✉ boqinggo@outlook.com [i]
Internship Mentor	**Chen Fang**, *Research Scientist*, Bytedance AI Lab
	✉ fangchen@bytedance.com [i]
Research Advisor	**Manmohan Chandraker**, *Professor*, University of California, San Diego
	✉ mkchandraker@eng.ucsd.edu [i]
Research Advisor	**Shao-Yi Chien**, *Professor*, National Taiwan University
	✉ sychien@ntu.edu.tw [i]