# Chun-Han (Hank) Yao

Curriculum Vitae

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\text{\text{\text{\text{\text{\text{chhankyao.github.io}}}}}\)

# 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**

arXiv 2025 SV4D 2.0: Enhancing Spatio-Temporal Consistency in Multi-View Video Diffusion for High-Quality 4D Generation [page]

<u>Chun-Han Yao\*</u>, Yiming Xie\*, Vikram Voleti, Huaizu Jiang, Varun Jampani (\*equal contributions) arXiv preprint, 2025

arXiv 2025 STABLE VIRTUAL CAMERA: Generative View Synthesis with Diffusion Models [page]

Jensen Jinghao Zhou\*, Hang Gao\*, Vikram Voleti, Aaryaman Vasishta, <u>Chun-Han Yao</u>, Mark Boss, Philip Torr, Christian Rupprecht, Varun Jampani (\*equal contributions) arXiv preprint, 2025

arXiv 2025 FaceCraft4D: Animated 3D Facial Avatar Generation from a Single Image Fei Yin, Mallikarjun B R, Chun-Han Yao, Rafal Mantiuk, Varun Jampani arXiv preprint, 2025

ICLR 2025 **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) International Conference on Learning Representations (ICLR), 2025

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

CVPR 2024 ANIM: Accurate Neural Implicit Model for Human Reconstruction from a Single RGB-D Image [page]

Marco Pesavento, Yuanlu Xu, Nikolaos Sarafianos, Robert Maier, Ziyan Wang, <u>Chun-Han Yao</u>, Marco Volino, Edmond Boyer, Adrian Hilton, Tony Tung Conference on Computer Vision and Pattern Recognition (CVPR), 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]

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

Project: 3D and 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: Boqing Gong
- Project: Federated Multi-target Domain Adaptation (DualAdapt)

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

- o Mar. 2019 Aug. 2019
- o Mentors: Xiaohui Shen, Chen Fang, Yangyue Wan
- o 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

- Sep. 2017 Jun. 2018
- Advisor: Chung-Kuan Cheng
- o 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

- o Feb. 2015 Sep. 2016
- o Advisor: Shao-Yi Chien
- Projects: Video Temporal Consistency, Video Color Transfer

#### Research Assistant MediaTek, Taipei, Taiwan

- o 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, 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 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 Boging Gong, Research Scientist, Google

Internship Mentor Chen Fang, Research Scientist, Bytedance Al Lab

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

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