Chieh Hubert Lin

✉ hubert052702@gmail.com | ⌂ hubert0527.github.io | ⬡ hubert0527

Education

University of California, Merced (UC Merced) *Jan. 2021 - Now*   *Merced, CA, U.S.*
- Ph.D. in EECS, working with Ming-Hsuan Yang , Hsin-Ying Lee , Hung-Yu Tseng and Sergey Tulyakov .
- Works on general topics in computer vision and generative modeling.

National Tsing-Hua University (NTHU) *Sep. 2013 - June. 2018*   *Hsingchu, Taiwan*
- B.S. in CS (major GPA: 3.65/4.3).
- Published one paper to ECCV as a co-first author and submitted one paper as a first author before graduation.
- Works on generative modeling, neural architecture search and natural language processing.

Publications

(* indicates equal contribution.)

Scene Completion   *TBA*
Chieh Hubert Lin, Hung-Yu Tseng, TBA   *TBA*
[TBA]

NeurAlchemist: Towards Physically Based Rendering with Diffusion Models   *TBA*
Chieh Hubert Lin, Hsin-Ying Lee, Yen-Chi Cheng, Ming-Hsuan Yang, Sergey Tulyakov   *TBA*
[TBA]

InfiniCity: Infinite-Scale City Synthesis   *ICCV'23*
Chieh Hubert Lin, Hsin-Ying Lee, Willi Menapace, Menglei Chai, Aliaksandr Siarohin, Ming-Hsuan Yang, Sergey Tulyakov   *Oct. 2023*
[Paper] [Project Page]

Unveiling The Mask of Position-Information Pattern Through the Mist of Image Features   *ICML'23*
Chieh Hubert Lin, Hsin-Ying Lee, Hung-Yu Tseng, Maneesh Singh, Ming-Hsuan Yang   *Jul. 2023*
[Paper]

In&Out: Diverse Image Outpainting via GAN Inversion   *CVPR'22*
Yen-Chi Cheng, Chieh Hubert Lin, Hsin-Ying Lee, Jian Ren, Sergey Tulyakov, Ming-Hsuan Yang   *Jun. 2022*
[Paper] [Project Page]

InfinityGAN: Towards Infinite-Pixel Image Synthesis   *ICLR'22*
Chieh Hubert Lin, Hsin-Ying Lee, Yen-Chi Cheng, Sergey Tulyakov, Ming-Hsuan Yang   *Apr. 2022*
[Paper] [Project Page]

InstaNAS: Instance-aware Neural Architecture Search   *AAAI'20*
An-Chieh Cheng*, Chieh Hubert Lin*, Da-Cheng Juan, Wei Wei, Min Sun   *Feb. 2020*
[Paper] [Project Page]

COCO-GAN: Generation by Parts via Conditional Coordinating (oral presentation)   *ICCV'19*
Chieh Hubert Lin, Chia-Che Chang, Yu-Sheng Chen, Da-Cheng Juan, Wei Wei, Hwann-Tzong Chen   *Mar. 2019*
[Paper] [Project Page]

Point-to-Point Video Generation   *ICCV'19*
Tsun-Hsuan Wang*, Yen-Chi Cheng*, Chieh Hubert Lin, Hwann-Tzong Chen, Min Sun   *Mar. 2019*
[Paper] [Project Page]

3D LiDAR and Stereo Fusion using Stereo Matching Network with Conditional Cost Volume Normalization   *IROS'19*

Tsun-Hsuan Wang, Hou-Ning Hu, *Chieh Hubert Lin*, Yi-Hsuan Tsai, Wei-Chen Chiu, Min Sun   *Apr. 2019*

[Paper] [Project Page]

Escaping from Collapsing Modes in a Constrained Space   *ECCV'18*

Chia-Che Chang*, *Chieh Hubert Lin*, Che-Rung Lee, Da-Cheng Juan, Wei Wei, Hwann-Tzong Chen   *Mar. 2018*

[Paper]

Professional Activities

Served as a reviewer for:

- **(Journal) Computer Vision**: IJCV.
- **(Conference) Computer Vision**: CVPR'23, ICCV'23, CVPR'22, ICCV'21, CVPR'21, WACV'21, CVPR'20, ICCV'19.
- **(Conference) Machine Learning**: NeurIPS'23, ICLR'23, NeurIPS'22, NeurIPS'21, ICLR'21, ICML'20.
- **(Conference) Graphics**: Eurographics'23.
- **(Conference) Artificial Intelligence**: AAAI'23, IJCAI'23, AAAI'22, AAAI'20, AAAI'19.

Media Reports

What It Looks Like When AI Designs a City.   *Sep. 2023*   *Bloomberg*

https://www.bloomberg.com/news/features/2023-09-16/ai-invades-urban-planning-and-design-with-mixed-results

AI generates virtual 3D cities that extend infinitely in any direction.   *Feb. 2023*   *NewScientist*

https://www.newscientist.com/article/2358993-ai-generates-virtual-3d-cities-that-extend-infinitely-in-any-direction/

Work Experience

Research Intern @ XR Photoreal, Meta.   *Aug. 2023 -*   *Seattle, WA, U.S.*

- Works on generative scene completion with Hung-Yu Tseng, and the XR Photoreal team.

Research Intern @ Creative Vision, Snap Inc.   *May. 2022 - Aug. 2023*   *Santa Monica, CA, U.S.*

- Works on generative modeling with Hsin-Ying Lee, Aliaksandr Siarohin, Menglei Chai and Sergey Tulyakov.

Research Assistant @ Vision Science Lab, National Tsing Hua University   *Jul. 2018 - Aug. 2019*   *Taiwan*

- Works on neural architecture search, meta-learning and generative modeling with Min Sun (NTHU), Wei-Chen Chiu (NCTU), Da-Cheng Juan (Google) and Wei Wei (Google).
- Works on generative modeling with Hwann-Tzong Chen (NTHU), Da-Cheng Juan (Google) and Wei Wei (Google).
- Four papers accepted to ICCV'19, IROS'19 and AAAI'20.

Student Researcher @ National Tsing Hua University   *Jun. 2017 - Feb. 2018*   *Taiwan*

- Works on generative modeling with Hwann-Tzong Chen (NTHU), Da-Cheng Juan (Google) and Wei Wei (Google).
- One paper accepted to ECCV'18.

Full-Year Software Engineer Intern @ Microsoft BingGC team   *Jul. 2017 - Jun. 2018*   *Taiwan*

Honors & Awards

Dec. 2022 **Snap Fellowship Honorable Mentions**, Snap Inc., US

Jun. 2022 **Bobcat Fellowship**, UC Merced, US

Jun. 2021 **Bobcat Fellowship**, UC Merced, US

Jan. 2021 **Bobcat Fellowship**, UC Merced, US

Sep. 2019 **Yahoo AI Scholarship**, Yahoo, Taiwan

Aug. 2019 **Appier AI Scholarship**, Appier, Taiwan

Aug. 2018 **Appier AI Scholarship**, Appier, Taiwan

Dec. 2017 **Honorable Mention**, Ministry of Science and Technology GAN Workshop, Taiwan