

Ting-Hsuan Liao

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Education

University of Maryland

Ph.D in COMPUTER SCIENCE

Advisor: Prof. [Jia-Bin Huang](#)

Overall GPA: 4.0 / 4.0

College Park, US

09/2022 - 11/2026 (exp.)

National Tsing Hua University

B.S. in COMPUTER SCIENCE

Advisor: Prof. [Chun-Yi Lee](#)

Overall GPA: 4.17 / 4.30, cumulative ranking: 9/142

Hsinchu, Taiwan

2018 - 2022

Experience

Adobe Research | Research Intern

May 2024 - Nov. 2024

Mentor: Uttaran Bhattacharya

Propose framework for shape-aware text to human motion generation. (CVPR 2025)

Intel Corporation | Research Intern

June 2023 - Dec. 2023

Mentor: Ilke Demir

Design new algorithms for texture synthesis for 3D scene.

ELSA Lab at National Tsing Hua University | Research Assistant

2020 - 2022

Mentors: Chun-Yi Lee

Conduct research toward CV and RL. (BMVC 2022, CVPRW 2022, IROS 2022)

Publications

PAD3R: Pose-Aware Dynamic 3D Reconstruction from Casual Videos

- Ting-Hsuan Liao*, Haowen Liu*, Yiran Xu, Songwei Ge, Gengshan Yang, Jia-Bin Huang.
- SIGGRAPH Asia 2025 (Conference track)

[PDF](#) [Website](#)

Bridging Diffusion Models and 3D Representations: A 3D Consistent Super-Resolution Framework

- Yi-Ting Chen, Ting-Hsuan Liao, Pengsheng Guo, Alex Schwing, Jia-Bin Huang.
- ICCV 2025

[PDF](#) [Website](#)

Shape My Moves: Text-Driven Shape-Aware Synthesis of Human Motions

- Ting-Hsuan Liao, Yi Zhou, Yu Shen, Chun-Hao Paul Huang, Saayan Mitra, Jia-Bin Huang, Uttaran Bhattacharya.
- CVPR 2025

[PDF](#) [Website](#)

VividDream: Generating 3D Scene with Ambient Dynamics

- Yao-Chih Lee, Yi-Ting Chen, Andrew Wang, Ting-Hsuan Liao, Brandon Y. Feng, Jia-Bin Huang.
- arXiv preprint

[PDF](#) [Website](#)

Text-driven Visual Synthesis with Latent Diffusion Prior

- Ting-Hsuan Liao, Songwei Ge, Yiran Xu, Yao-Chih Lee, Badour AlBahar, Jia-Bin Huang.
- arXiv preprint

[PDF](#) [Website](#)

Pixel-Wise Prediction based Visual Odometry via Uncertainty Estimation

- Hao-Wei Chen, Ting-Hsuan Liao, Hsuan-Kung Yang, Chun-Yi Lee.
- WACV 2023

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ELDA: Using Edges to Have an Edge on Semantic Segmentation Based UDA

- Ting-Hsuan Liao*, Huang-Ru Liao*, Shan-Ya Yang, Jie-En Yao, Li-Yuan Tsao, Hsu-Shen Liu, Chen-Hao Chao, Bo-Wun Cheng, Chia-Che Chang, Yi-Chen Lo, Chun-Yi Lee.
- BMVC 2022, CVPRW 2022

 pdf

Investigation of Factorized Optical Flows as Mid-Level Representations

- Hsuan-Kung Yang, Tsu-Ching Hsiao, Ting-Hsuan Liao*, Hsu-Shen Liu*, Li-Yuan Tsao*, Tzu-Wen Wang*, Shan-Ya Yang*, Yu-Wen Chen*, Huang-Ru Liao*, Chun-Yi Lee.
- IROS 2022

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Honors & Awards

2022	Dean's Fellowship for Incoming Ph.D Student of University of Maryland,
2019-2022	Academic Achievement Award (Five times) , top 5% of class
2021	Computer Science Senior Project Contest - Finalists , 12 out of 77 teams
2021	National Scholarship of Pan Wen-Yuan Foundation , 12 out of the nation
2021	Scholarship for EECS Excellent Students , 6 out of 144 students

Service

2025	Reviewer , CVPR, CVPRW, ICCV, SIGGRAPH Asia, TPAMI
2024	Reviewer , CVPR, ECCV
2023	Reviewer , CVPR
2022	Reviewer , ECCV

Teaching

Multimodal Foundation Models at UMD

Fall 2025

Teaching Assistant

Computer Vision at UMD

Spring 2024

Teaching Assistant

Discrete Structures at UMD

Fall 2023

Teaching Assistant

Introduction to Data Science at UMD

Fall 2022 and Spring 2023

Teaching Assistant

Logic Design Laboratory at NTHU

Fall 2020 and Fall 2021

Teaching Assistant

National Tsing Hua University

Spring 2021

Academic Counselor