

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

Sept. 2022 ~ June 2027 (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

Sept. 2018 ~ June 2022

Experience

Adobe Research | Research Intern

Mentor: Uttaran Bhattacharya

Design new algorithms for text to human motion generation.

May 2024 ~ Nov. 2024

Intel Corporation | Research Intern

Mentor: Ilke Demir

Design new algorithms for texture synthesis for 3D scene.

June 2023 ~ Dec. 2023

ELSA Lab at National Tsing Hua University | Research Assistant

Mentors: Chun-Yi Lee

Conduct research toward Computer Vision (CV) and Reinforcement Learning (RL). (BMVC 2022, CVPRW 2022, IROS 2022)

Spring 2020 ~ Spring 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)

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

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

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  pdf

Pixel-Wise Prediction based Visual Odometry via Uncertainty Estimation

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

Honors & Awards

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