

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 Teaching Assistant	<i>Fall 2025</i>
Computer Vision at UMD Teaching Assistant	<i>Spring 2024</i>
Discrete Structures at UMD Teaching Assistant	<i>Fall 2023</i>
Introduction to Data Science at UMD Teaching Assistant	<i>Fall 2022 and Spring 2023</i>
Logic Design Laboratory at NTHU Teaching Assistant	<i>Fall 2020 and Fall 2021</i>
National Tsing Hua University Academic Counselor	<i>Spring 2021</i>