

LUMING TANG

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EMPLOYMENT

Google DeepMind Jun 2024 - Present
Research Scientist at GenAI

EDUCATION

Cornell University, Department of Computer Science Jan 2019 - Jun 2024
Ph.D. in Computer Science
Advisor: Prof. Bharath Hariharan
Research Interests: Computer Vision and Machine Learning

Tsinghua University, Department of Physics Aug 2014 - Jul 2018
B.S. in Mathematics and Physics
Second Major in Economics

PUBLICATIONS AND MANUSCRIPTS

(* indicates equal contribution)

Lijie Fan*, **Luming Tang***, Siyang Qin*, Tianhong Li, Xuan Yang, Siyuan Qiao, Andreas Steiner, Chen Sun, Yuanzhen Li, Tao Zhu, Michael Rubinstein, Michalis Raptis, Deqing Sun, Radu Soricut. “Unified Autoregressive Visual Generation and Understanding with Continuous Tokens”, *Tech Report*.

Benlin Liu, Yuhao Dong, Yiqin Wang, Zixian Ma, Yansong Tang, **Luming Tang**, Yongming Rao, Wei-Chiu Ma, Ranjay Krishna. “Coarse Correspondences Boost Spatial-Temporal Reasoning in Multimodal Language Model”, in *Conference on Computer Vision and Pattern Recognition (CVPR 2025)*.

Luming Tang, Nataniel Ruiz, Qinghao Chu, Yuanzhen Li, Aleksander Holynski, David E. Jacobs, Bharath Hariharan, Yael Pritch, Neal Wadhwa, Kfir Aberman, Michael Rubinstein. “RealFill: Reference-Driven Generation for Authentic Image Completion”, in *Special Interest Group on Computer Graphics and Interactive Techniques (SIGGRAPH) 2024*, **Journal Track**.

Luming Tang, Menglin Jia, Qianqian Wang, Cheng Perng Phoo, Bharath Hariharan. “Emergent Correspondence from Image Diffusion”, in *Conference on Neural Information Processing Systems (NeurIPS 2023)*.

Chen-Hsuan Lin*, Jun Gao*, **Luming Tang***, Towaki Takikawa*, Xiaohui Zeng*, Xun Huang, Karsten Kreis, Sanja Fidler, Ming-Yu Liu, Tsung-Yi Lin. “Magic3D: High-Resolution Text-to-3D Content Creation”, in *Conference on Computer Vision and Pattern Recognition (CVPR 2023)*, **Highlight**.

Menglin Jia*, **Luming Tang***, Bor-Chun Chen, Claire Cardie, Serge Belongie, Bharath Hariharan, Ser-Nam Lim. “Visual Prompt Tuning”, in *European Conference on Computer Vision (ECCV 2022)*.

Davis Wertheimer*, **Luming Tang***, Bharath Hariharan. “Few-Shot Classification with Feature Map Reconstruction Networks”, in *Conference on Computer Vision and Pattern Recognition (CVPR 2021)*.

Luming Tang, Davis Wertheimer, Bharath Hariharan. “Revisiting Pose-Normalization for Fine-Grained Few-Shot Recognition”, in *Conference on Computer Vision and Pattern Recognition (CVPR 2020)*.

Luming Tang, Yexiang Xue, Di Chen, Carla P. Gomes. “Multi-Entity Dependence Learning with Rich Context via Conditional Variational Auto-encoder”, in *AAAI Conference on Artificial Intelligence (AAAI 2018)*.

Zhongdao Wang*, **Luming Tang***, Xihui Liu, Zhuliang Yao, Shuai Yi, Jing Shao, Junjie Yan, Shengjin Wang, Hongsheng Li, Xiaogang Wang. “Orientation Invariant Feature Embedding and Spatial Temporal Regularization for Vehicle Re-identification”, in *International Conference on Computer Vision (ICCV 2017)*.

Luming Tang, Boyang Deng, Haiyu Zhao, Shuai Yi. “Hierarchical Deep Recurrent Architecture for Video Understanding”, in *CVPR 2017 Workshop on Youtube-8M Large-Scale Video Understanding*.

EXPERIENCE

Google Research, Research Intern May 2023 - Present
Hosts: Neal Wadhwa, Nataniel Ruiz, Miki Rubinstein

- Worked on RealFill: reference-driven generation for authentic image completion.

NVIDIA Research, Research Intern May 2022 - Feb 2023
Mentor: Tsung-Yi Lin

- Worked on Magic3D: high-resolution text-to-3D generation and editing with image diffusion prior.

Waymo, Perception Intern May 2021 - Nov 2021
Mentors: Shiwei Sheng, Andy Tsai, Ruichi Yu

- Worked on end-to-end data-driven 3D multi-object tracking with Transformer.

Microsoft Research Asia, Research Intern Sep 2018 - Dec 2018
Mentor: David Wipf

- Worked on training high-resolution VAE and enabling high-quality image generation.

TEACHING ASSISTANTS

CS 4787 Principles of Large-Scale Machine Learning	Spring 2019
CS 2110 OOP and Data Structures	Summer 2019
CS 6670 Graduate Computer Vision	Fall 2019

SELECTED AWARDS

Magic3D named among Top 10 NVIDIA Research Highlights of 2023	Jan 2024
NeurIPS’23 Scholar Award	Oct 2023
CVPR’21 Outstanding Reviewer	Jun 2021
Star of Tomorrow (awarded for distinguished internship), Microsoft Research Asia	Dec 2018
Distinguished Academic Innovation Award, Department of Physics, Tsinghua (2/100)	Oct 2017
Academic Talent Program Scholarship, Tsinghua	Dec 2014
First Prize in Chinese Physics Olympiad Competition, ranked 11-th in Henan Province	Sep 2013

ACADEMIC SERVICES

Reviewer: CVPR’21-25, ICCV/ECCV’21-25, ICML’23-24, NeurIPS’23, ICLR’24, SIGGRAPH Asia’24, SIGGRAPH’25, TPAMI-SI, IJCV
PC Member: AAAI’23

SKILLS

Python, PyTorch, TensorFlow, JAX, L^AT_EX