Tianqin Li

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Doctoral Student, Computer Science Department, School of Computer Science, Carnegie Mellon University

EDUCATION

• Carnegie Mellon University, School of Computer Science, PA

Ph.D. Program in Computer Science

Aug 2022 – Present

• Carnegie Mellon University, School of Computer Science, PA

Aug 2019 - May 2021

Master of Science in Computational Biology

Graduate with Research Excellence

Sun Yat-sen University, China

Aug 2015 - June 2019

Bachelor of Science in Biotechnology

National Elite Class for Applicational Science and Technology

University of California, Berkeley, CA

Jan 2018 – Aug 2018

Non-degree session for Statistics & Computer Science

RELEVANT COURSEWORK

Mobile Computing, Deep Learning System, Deep Learning, Machine Learning, Computer System, Discrete Differential Geometry, Distributed & Operating System, Algorithm & Advanced Data Structure, Probabilistic Graphic Models, High Dimensional Statistics, Linear Algebra, Neural Computation, Deep Reinforcement Learning & Control

SELECTED PUBLICATION

- Jade Zheng*, Fernando Jia*, Florence Li*, Rebekah Jia*, <u>Tianqin Li</u>*. Intelligence Cubed: A Decentralized Modelverse for Democratizing AI. **Preprint 2025.**
 - * denotes equal contributions (alphabetical order).
- <u>Tianqin Li</u>, Ziqi Wen, Leiran Song, Jun Liu, Zhi Jing, Tai Sing Lee. From Local Cues to Global Percepts: Emergent Gestalt Organization in Self-Supervised Vision Models. **Preprint 2025.**
- <u>Tianqin Li</u>*, Junru Zhao*, Dunhan Jiang, Shenghao Wu, Alan Ramirez, Tai Sing Lee. Perceptual Inductive Bias Is What You Need Before Contrastive Learning. **CVPR 2025.**
 - * denotes equal contributions (alphabetical order).
- Yifan Li, Xin Li, <u>Tianqin Li</u>, Wenbin He, Yu Kong, Liu Ren. "ViT-Split: Unleashing the Power of Vision Foundation Models via Efficient Splitting Heads". **ICCV 2025.**
- <u>Tianqin Li</u>, Ziqi Wen, Yangfan Li, Tai Sing Lee. "Emergence of Shape Bias in Convolutional Neural Networks through Activation Sparsity". **NeurIPS 2023 (Oral Presentation selective 1 %).**
- <u>Tianqin Li</u>*, Junru Zhao*, Tai Sing Lee. "Incorporating Human Shape Bias for Accelerated Self-supervised Learning". In submission, 2024.
 - * denotes equal contributions (alphabetical order).
- <u>Tianqin Li</u>*, Zijie Li*, Andrew Luo, Harold Rockwell, Amir Barati Farimani, Tai Sing Lee. "Prototype memory and attention mechanisms for few-shot image generation". **ICLR 2022**.
 - * denotes equal contributions (alphabetical order).
- <u>Tianqin Li</u>*, Yao-Hung Hubert Tsai*, Martin Q. Ma, Han Zhao, Kun Zhang, Louis-Philippe Morency, Ruslan Salakhutdinov. "Conditional Contrastive Learning with Kernel". **ICLR 2022**.
 - * denotes equal contributions (alphabetical order).
- **Tiangin Li***, Yao-Hung Hubert Tsai*, Weixin Liu, Peiyuan Liao, Ruslan Salakhutdinov, Louis-Philippe Morency.
 - "Learning Weakly-supervised Contrastive Representations". ICLR 2022.
 - * denotes equal contributions (alphabetical order).

Zijie Li, <u>Tianqin Li</u>, Amir Barati Farimani. "TPU-GAN: Learning temporal coherence from dynamic point cloud sequence". ICLR 2022.

Andrew Luo, <u>Tianqin Li</u>, Wen-Hao Zhang, Tai Sing Lee. "SurfGen: Adversarial 3D Shape Synthesis with Explicit Surface Discriminators". **ICCV 2021**.

TEACHING

- CMU 11-777 Multimodal Machine Learning, Language Technology Institute
- CMU 15368 Computational Perception, Computer Science Department

AWARD & Scholarship

- Best Software Project, 16th International Genetic Engineering Machine Competition (12 / 310 teams)
- NeurIPS 2023 Oral (selective ~1%).
- NeurIPS 2023 Scholarship.
- Gibbons-Newell Graduate Fellowship.