Tianyu Chen

(+1) 773-431-6690 tianyuchen@utexas.edu Google Scholar TianyuCodings

EDUCATION

University of Texas at Austin	Ph.D. in Statistics (GPA: 4.0), Austin, TX	*Oct. 2023 – July 2028 (expected)*
University of Chicago	M.S. in Statistics (GPA: 3.97), Chicago, IL	*Oct. 2021 – July 2023*
Fudan University	B.S. in Statistics (GPA: 3.7), Shanghai, China	*Sept. 2017 – July 2021*

INDUSTRY EXPERIENCE

Microsoft Research | Gen AI Posttrain Remote & Austin, TX

Research Scientist Intern (Mentors: Zhendong Wang, Lijuan Wang) *Feb. 2025 – Present*

- Developed an object-centric vision-language model (VLM) agent that automates fine-grained, multi-turn image-editing evaluation, eliminating reliance on human annotators for benchmark construction. The project received media coverage in well-known Chinese outlets and is showcased on the project website.
- Led large language model (LLM) post-training research on mathematical reasoning and LLM-as-a-judge alignment, including recipe design for **autoregressive** and **diffusion-based** language models.

MORE INFORMATION

LinkedIn:	`https://www.linkedin.com/in/tianyu-chen-1a056a160/`
Website:	`https://tianyucodings.github.io/`
Research Interests:	LLM post-training (both AR and DLLM), reinforcement learning, image editing, and diffusion distillation

SELECTED PUBLICATION HIGHLIGHTS

- **Five Neurips publications (2023–2025)** across statistics, reinforcement learning, and generative modeling, including a Spotlight paper in 2025; only one is **not** first-authored.
- **Reinforcement learning & generative depth** showcased by Neurips 2024 diffusion trust-region policies and a Neurips 2025 acceptance on LLM reasoning post-training, complemented by the 2025 EdiVal-Agent framework.
- **Four-paper ICLR 2026 pipeline** advancing diffusion distillation, causal generative inference, and neural posterior calibration, alongside AISTATS and PNAS publications secured early in the Ph.D.

REINFORCEMENT LEARNING

- [**Neurips 2024**] **Tianyu Chen**, Zhendong Wang, Mingyuan Zhou."Diffusion Policies creating a Trust Region for Offline Reinforcement Learning." Published in:*Neurips 2024*. [arXiv]. 2024.
- [**Neurips 2025**] Yifan Sun, Jingyan Shen, Yibin Wang, **Tianyu Chen**, Zhendong Wang, Mingyuan Zhou, Huan Zhang."Improving Data Efficiency for LLM Reinforcement Fine-tuning Through Difficulty-targeted Online Data Selection and Rollout Replay." Accepted to:*Neurips 2025*. [arXiv]. 2025.

IMAGE EDITING & DIFFUSION DISTILLATION

- [**ICLR 2026 Submission**] **Tianyu Chen***, Yasi Zhang*, ... Zhendong Wang, Kevin Lin, Xiaofei Wang, Zhengyuan Yang, Linjie Li, Chung-Ching Lin, Jianwen Xie, Oscar Leong, Lijuan Wang, Ying Nian Wu, Mingyuan Zhou."EdiVal-Agent: An Object-Centric Framework for Automated, Scalable, Fine-Grained Evaluation of Multi-Turn Editing." Preprint. [arXiv]. 2025.
- [**ICLR 2026 Submission**] **Tianyu Chen***, Yasi Zhang*, Zhendong Wang, Ying Nian Wu, Oscar Leong, Mingyuan Zhou."Denoising Score Distillation: From Noisy Diffusion Pretraining to One-Step High-Quality Generation." Preprint [arXiv]. 2025.
- [**ICLR 2026 Submission**] **Tianyu Chen***,Yasi Zhang*, Zhendong Wang, Ying Nian Wu, Mingyuan Zhou, Oscar Leong."Restoration Score Distillation: From Corrupted Diffusion Pretraining to One-Step High-Quality Generation." Preprint [arXiv]. 2025.
- [**ICLR 2026 Submission**] **Tianyu Chen***,Xinran Song*, Mingyuan Zhou."A Generative Framework for Causal Estimation via Importance-Weighted Diffusion Distillation." Preprint [arXiv]. 2025.

STATISTICS

- [**Neurips 2025 Spotlight**] **Tianyu Chen**, Vansh Bansal, James G. Scott."CoLT: The conditional localization test for assessing the accuracy of neural posterior estimates." **Spotlight at:** *Neurips 2025*. [arXiv]. 2025.
- [**ICLR 2026 Submission**] **Vansh Bansal**, Tianyu Chen, James G. Scott."The surprising strength of weak classifiers for validating neural posterior estimates." Submitted to:*ICLR 2026*. [arXiv]. 2025.
- [**AISTATS 2025**] **Tianyu Chen**, James G. Scott."Conditional diffusions for neural posterior estimation." [arXiv]. 2025.
- [**Neurips 2024**] **Tianyu Chen**, Kevin Bello, Francesco Locatello, Bryon Aragam, Pradeep Ravikumar."Identifying General Mechanism Shifts in Linear Causal Representations." Published in:*Neurips 2024*. [arXiv]. 2024.
- [**Neurips 2023**] **Tianyu Chen**, Kevin Bello, Bryon Aragam, Pradeep Ravikumar."iSCAN: Identifying Causal Mechanism Shifts among Nonlinear Additive Noise Models." Published in:*Neurips 2023*. [arXiv]. 2023.