

XIAOFENG TAN

Shenzhen & Nanjing, China

[Email](#) · [Homepage](#) · [GitHub](#) · [Scholar](#)

RESEARCH INTERESTS

RLHF, RLVR, AIGC, 3D Human Modeling, Preference Optimization, Diffusion Models, Multimodal Learning.

EDUCATION

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|--|---|
| Southeast University (SEU) , Nanjing, China M.Sc. in Computer Science PALM Lab , supervised by Prof. Hongsong Wang First-Class Academic Scholarship & Tencent Scholarship (top 1%); Summer Camp Rank 2 | Sept 2024 – Present GPA: 88.6 /100 |
| Shenzhen University (SZU) , Shenzhen, China B.E. in Computer Science & B.Sc. in Mathematics (<i>Dual Degree</i>) Thesis Advisor: Prof. Can Gao; Graduation Speech Representative; Featured in 2024 Admissions Guide | Sept 2020 – Jun 2024 GPA: 88.9 /100 · 4.07 /4.50 |

SELECTED PUBLICATIONS

* indicates equal contribution or first author (student).

— Preprints —

Diversity Collapse despite Constant Entropy: Understanding Entropy in Flow-based RL

Xiaofeng Tan, Jun Liu, Bin-Bin Gao, Yuanting Fan, Xi Jiang, Chengjie Wang, Hongsong Wang, Feng Zheng
Under Review (ICML 2026)

ConsistentRFT: Reducing Visual Hallucinations in Flow-based Reinforcement Fine-Tuning

Xiaofeng Tan, Jun Liu, Yuanting Fan, Bin-Bin Gao, Xi Jiang, Xiaochen Chen, Jinlong Peng, Chengjie Wang, Hongsong Wang, Feng Zheng
Under Review (CVPR 2026)

FG-Diff: Frequency-Guided Diffusion Model with Perturbation Training for Skeleton-Based VAD

Xiaofeng Tan, Hongsong Wang, Xin Geng, Liang Wang
Under Review (TIP, 2025, MiR*3 + MR*1)

[Project] [PDF] [Code]

— Published —

EasyTune: Efficient Reinforcement Fine-Tuning for Diffusion-Based Motion Generation

Xiaofeng Tan*, Wanjiang Weng*, Haodong Lei, Hongsong Wang
ICLR'26 · International Conference on Learning Representations (CORE-A*)
[Project] [Openreview]

ReAlign: Text-to-Motion Generation via Step-Aware Reward-Guided Alignment

Wanjiang Weng*, Xiaofeng Tan*, Junbo Wang, Guo-Sen Xie, Pan Zhou, Hongsong Wang
AAAI'26 · AAAI Conference on Artificial Intelligence (CCF-A, CORE-A*)
[Project]

SoPo: Text-to-Motion Generation Using Semi-Online Preference Optimization

Xiaofeng Tan, Hongsong Wang, Xin Geng, Pan Zhou
NeurIPS'25 · Advances in Neural Information Processing Systems (CCF-A, CORE-A*)
[Project] [PDF] [Code]

Fuzzy Granule Density-Based Outlier Detection with Multi-Scale Granular Balls

Can Gao (Supervisor), Xiaofeng Tan*, Jie Zhou, Weiping Ding, Witold Pedrycz
TKDE'25 · IEEE Transactions on Knowledge and Data Engineering (CCF-A, SCI-Q1)
[PDF] [Code]

RESEARCH EXPERIENCE

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|--|---|
| Tencent Inc. , Shenzhen, China Research Intern @ YouTu Lab Research Direction: RLHF, RLVR, AIGC | Jul 2025 – Present Mentor: Jun Liu Works: Consistent-RFT, PEC-RFT |
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Singapore Management University, Singapore (Remote)
Remote Visiting Student @ [Language and Vision Lab \(LV Lab\)](#)
Research Direction: RLHF, Motion Generation

Jul 2024 – Mar 2025
Mentor: Pan Zhou
Works: SoPo (NeurIPS'25), ReAlign (AAAI'26)

Southeast University, Nanjing, China
Master Student @ [PAttern Learning and Mining \(PALM\) Lab](#)
Research Direction: RLHF, Motion Generation, Action Recognition

Apr 2024 – Present
Mentor: Hongsong Wang
Works: FG-Diff, EasyTune (ICLR'26)

Shenzhen University, Shenzhen, China
Undergraduate Research Assistant @ [Computer Vision Institute](#)
Research Direction: Outlier Detection, Anomaly Detection

Oct 2022 – Oct 2023
Mentor: Can Gao
Works: MGBOD (TKDE), TWCOD (IJAR)

SERVICE

Reviewer: ICML 2026

HONORS & AWARDS

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|-------------------------------------|--|------|
| Tencent Scholarship | Southeast University, Tencent | 2025 |
| First-Class Academic Scholarship | Southeast University | 2025 |
| Outstanding Graduate Representative | Shenzhen University (Graduation Speech) | 2024 |
| Featured in Admissions Guide | Shenzhen University (as Outstanding Student) | 2024 |