XIAOFENG TAN

Shenzhen & Nanjing, China

Email · 🌐 Homepage · 😱 GitHub · 📚 Scholar

RESEARCH INTERESTS

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

EDUCATION

Southeast University (SEU), Nanjing, China

Sept 2024 – Present

M.Sc. in Computer Science

GPA: 88.6/100

PALM Lab, supervised by Prof. Hongsong Wang

First-Class Academic Scholarship & Tencent Scholarship (top 1%); Summer Camp Rank 2

Shenzhen University (SZU), Shenzhen, China

Sept 2020 - Jun 2024

B.E. in Computer Science & B.Sc. in Mathematics (Dual Degree)

GPA: 88.9/100 · 4.07/4.50

Thesis Advisor: Prof. Can Gao; Graduation Speech Representative; Featured in 2024 Admissions Guide

SELECTED PUBLICATIONS

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)

EasyTune: Efficient Step-Aware Fine-Tuning for Diffusion-Based Motion Generation

Xiaofeng Tan, Wanjiang Weng, Haodong Lei, Hongsong Wang

Under Review (ICLR 2026, Score: 6.5/10)

[Project] [Openreview]

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

Wanjiang Weng*, Xiaofeng Tan*, Hongsong Wang, Pan Zhou

AAAI, 2025 · 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, 2025 · Advances in Neural Information Processing Systems (CCF-A, CORE-A*)

[Project] [PDF] [Supp] [Code]

FG-Diff: Frequency-Guided Diffusion Model with Perturbation Training for Skeleton-Based Video Anomaly Detection

Xiaofeng Tan, Hongsong Wang, Xin Geng, Liang Wang

Under Review (TIP, MiR*3 + MR*1)

[Project] [PDF] [Supp] [Code]

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

Can Gao (Supervisor), Xiaofeng Tan*, Jie Zhou, Weiping Ding, Witold Pedrycz

TKDE, 2025 · IEEE Transactions on Knowledge and Data Engineering (CCF-A, SCI-Q1)

[PDF] [Code] [Supp]

^{*} indicates equal contribution or first author (student).

RESEARCH EXPERIENCE

Tencent Inc., Shenzhen, China Jul 2025 – Present Research Intern @ YouTu Lab Mentor: Jun Liu, Feng Zheng

Works: Consistent-RFT Research Direction: RLHF, RLVR, AIGC

Singapore Management University, Singapore (Remote) Jul 2024 - Mar 2025 Remote Visiting Student @ Language and Vision Lab (LV Lab) Mentor: Pan Zhou

Research Direction: RLHF, Motion Generation Works: SoPo (NeurIPS), ReAlign (AAAI)

Southeast University, Nanjing, China

Apr 2024 – Present Master Student @ PAttern Learning and Mining (PALM) Lab Mentor: Hongsong Wang Research Direction: RLHF, Motion Generation, Action Recognition Works: FG-Diff, EasyTune

Shenzhen University, Shenzhen, China

Oct 2022 - Oct 2023 Undergraduate Research Assistant @ Computer Vision Institute Mentor: Can Gao

Research Direction: Outlier Detection, Anomaly Detection Works: MGBOD (TKDE), TWCOD (IJAR)

HONORS & AWARDS

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

Last updated: December 2024