Ruibin Li

Ph.D. Candidate · Video Generation Researcher

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The Hong Kong Polytechnic University · Hung Hom, Kowloon, Hong Kong

Research Interests

Video generation, editing, and understanding; diffusion and flow-model post-training; few-step distillation; real-time long-horizon streaming generation; image generation and editing.

Education

The Hong Kong Polytechnic University **2022 — 2027**

Ph.D. in Computing · Supervisor: Prof. Lei Zhang · Expected May 2027

Tianjin University **2019 — 2022**

M.Eng. in Computer Science & Technology · Supervisor: Prof. Xiaofei Wang

Tianjin University **2015 — 2019**

B.Eng. in Computer Science & Technology · Ranked 7 / 120

Research Experience

Alibaba · ATH **Jun 2026 — Present**

T-Star Research Intern · HappyHorse Video Generation Group

Video foundation models, high-resolution synthesis, and long-horizon streaming generation.

ByteDance **Mar 2025 — Jun 2026**

Video Generation Research · Global Applied ML

Few-step distillation, unified generation and editing, and real-time streaming video.

OPPO Research Institute **Jul 2024 — Feb 2025**

Image Editing Research

Training-free and training-based image editing, with a focus on robust object removal.

Publications & Preprints

* Equal contribution. Publications and review statuses follow the supplied CV.

1. **Avatar-Forever: Decoupled Parallel Training for High-Quality Real-Time Infinite Avatars**
   Ruibin Li, Tao Yang, Zhiyuan Ma, Fangzhou Ai, Shilei Wen, Lei Zhang, et al.
   NeurIPS 2026 (under review)
2. **Long-Horizon Streaming Video Generation via Hybrid Attention with Decoupled Distillation**
   Ruibin Li, Tao Yang, Shilei Wen, Bingyue Peng, Lei Zhang, et al.
   NeurIPS 2026 (under review)
3. **Self-Transcendence: Is External Feature Guidance Indispensable for Accelerating Diffusion Transformer Training?**
   Lingchen Sun, Rongyuan Wu, Zhengqiang Zhang, **Ruibin Li**, Lei Zhang, et al.
   ECCV 2026
4. **Diversity-Preserved Distribution Matching Distillation for Fast Visual Synthesis**
   Tianhe Wu*, **Ruibin Li***, Lei Zhang, Kede Ma.
   ICML 2026

5. **CoCoEdit: Content-Consistent Image Editing via Region-Regularized Reinforcement Learning**
   Yuhui Wu, Chenxi Xie, **Ruibin Li**, Lei Zhang, et al.
   ICML 2026
6. **Many-for-Many: Unify the Training of Multiple Video and Image Generation and Manipulation Tasks**
   Ruibin Li*, Tao Yang*, Lei Zhang, et al.
   ICLR 2026
7. **RORem: Training a Robust Object Remover with Human-in-the-Loop**
   Ruibin Li, Tao Yang, Song Guo, Lei Zhang.
   CVPR 2025
8. **InsViE-1M: Effective Instruction-Based Video Editing with Elaborate Dataset Construction**
   Yuhui Wu, Liyi Chen, **Ruibin Li**, Lei Zhang, et al.
   ICCV 2025
9. **DeNC: Unleash Neural Codecs in Video Streaming with Diffusion Enhancement**
   Qihua Zhou*, **Ruibin Li***, Song Guo, et al.
   AAAI 2025
10. **Source Prompt Disentangled Inversion for Boosting Image Editability with Diffusion Models**
    Ruibin Li, Ruihuang Li, Song Guo, Lei Zhang.
    ECCV 2024
11. **FreePIH: Training-Free Painterly Image Harmonization with Diffusion Models**
    Ruibin Li, Jingcai Guo, Song Guo, et al.
    ACM MM 2024 · Oral
12. **On the Robustness of Neural-Enhanced Video Streaming Against Adversarial Attacks**
    Qihua Zhou, Jingcai Guo, Song Guo, **Ruibin Li**, Jinlong Zhang, Bing Wang, Zhiwei Xu.
    AAAI 2024
13. **Dissecting Arbitrary-Scale Super-Resolution Capability from Pre-Trained Diffusion Generative Models**
    Ruibin Li, Qihua Zhou, Song Guo, et al.
    arXiv 2023
14. **Neighboring-Aware Caching in Heterogeneous Edge Networks by Actor-Attention-Critic Learning**
    Y. Zhao, **Ruibin Li**, C. Wang, X. Wang, V. C. M. Leung.
    IEEE ICC 2021 · Best Paper Award
15. **Attention-Weighted Federated Deep Reinforcement Learning for Device-to-Device Assisted Heterogeneous Collaborative Edge Caching**
    X. Wang, **Ruibin Li**, C. Wang, X. Li, T. Taleb, V. C. M. Leung.
    IEEE JSAC 2020

Selected Honors & Awards

2022 · Hong Kong PhD Fellowship Scheme

2022 · Outstanding Master’s Graduate, Tianjin University

2021 · National Scholarship for Postgraduates

2021 · IEEE ICC Best Paper Award

2020 · Lu Kaiming Alumni Scholarship

2019 · Outstanding Graduate, Tianjin University

2018 · Tan Xuguang Alumni Scholarship