

WENTAO HU

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EDUCATION

Nanyang Technological University (QS15)

Nov. 2025 (expected)

M.Eng in Computer Science and Engineering (research-based program)

GPA: 3.83/5.0

Supervisor: Prof. Hanwang Zhang

Hunan University (Project 985)

Jun. 2023

B.Sc in Statistics

GPA: 3.55/4.0

RESEARCH INTERESTS

Multimodal Large Language Model, Video Generation

PUBLICATIONS

[1] Anonymous authors (Co-first authors). "Reasoning Physical Video Generation with Diffusion Timestep Tokens via Reinforcement Learning." In Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV), 2025. (under review)

[2] Anonymous authors. "On Path to Multimodal Generalist: Levels and Benchmarks." In Proceedings of the International Conference on Machine Learning (ICML), 2025. (under review)

RESEARCH EXPERIENCE

Huawei Central Media Technology Institute, 2012 Laboratory

Aug. 2024 - Present

Research Intern

Singapore

Autoregressive Video Generation with Reinforcement Learning

Aug. 2024 - Mar. 2025

Supervisors: Dr. Wang Lin, Dr. Zhongqi Yue

- Explored autoregressive models for video generation using reinforcement learning, with a focus on capturing real-world physical dynamics.
- Conducted an extensive literature review on autoregressive video generation. Built a training framework on both GPU and NPU platforms using Megatron-LM, ModelLink, and MindSpeed. Based on phyworld dataset, curated and constructed a custom dataset designed to simulate real-world physical dynamics.
- The project paper has been submitted to ICCV 2025.

A Diffusion Timestep Tokenizer for Visual Tasks

Aug. 2024 - Present

Supervisors: Dr. Fengda Zhang, Dr. Zhongqi Yue and Prof. Hanwang Zhang

- Explored a timestep-based visual tokenizer that abandons spatial properties and performs excellently on tasks such as image editing and video generation.
- Conducted the development of an inference and evaluation pipeline for tokenizer, participated in the design and implementation of part of ablation experiments, and curated and constructed a large-scale high-resolution dataset for training.

SKILLS/HOBBIES

Language

Mandarin(native), English(IELTS: 6.5, GRE: 330)

Programming Languages

Python, MATLAB, R

Hobbies

table tennis, xiangqi