# Yuming Li — Curriculum Vitae

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## Education

***Peking University*** **Beijing, China**
*Master's in Software Engineering (Artificial Intelligence)* *2023 – Present*

***Northwestern Polytechnical University*** **Xi'an, China**
*Bachelor's in Computer Science and Technology* *2019 – 2023*

## Research Experience

**X-Humanoid** **Beijing, China**
*Research Intern* *Feb 2025 – Dec 2025*
- Focused on fine-tuning Wan2.1-based video diffusion models for scene-level world simulation and post-trained reinforcement learning agents on the generated environments.
- Supported downstream video-to-action tasks through integration with Multimodal Large Language Models (MLLMs) after world model construction.

**ByteDance** **Beijing, China**
*Research Intern, Commercialization Department* *Feb 2025 – June 2025*
- Trained a unified *Multimodal Understanding & Generation* large model; optimized its cross-modal tokenizer, then fine-tuned the model for image editing and introduced tabular tokens to boost classification performance.
- Optimized the initial noise for video generation, enhancing the temporal consistency and quality of generated videos.

**Tencent** **Shenzhen, China**
*Research Intern, RoboticsX* *Jun 2024 – Feb 2025*
- Investigated visual-language-action (VLA) models for robotic manipulation; reproduced the Pi-0 model and diffusion-policy.
- Built a dynamic-model-based dual-arm system for cloth folding, leveraging 3D point-cloud state estimation to achieve precise manipulation of flexible objects.

**Phigent Robotics** **Beijing, China**
*Research Intern* *Dec 2023 – Jun 2024*
- Focused on high-resolution image generation using low-memory techniques, achieving significant improvements in both speed and model scalability for high-resolution outputs.

## Publications

[1]: **Yuming Li***, M. Lu, Z. Li, X. Chi, Q. She, S. Zhang. **A-ToMe: Adaptive Token Merge for Diffusion Models**. *Under Review

[2]: **Yuming Li***, P. Jia, D. Hong, Y. Jia, Q. She, R. Zhao, M. Lu, S. Zhang. **ASGDiffusion: Parallel High-Resolution Generation with Asynchronous Structure Guidance**. *Under Review

[3]: C. Bai, **Yuming Li***, M. Lu, S. Zhang. **Noise Optimization for Video Generation: A Learnable Approach to Enhance Temporal Consistency**. *Under Review

[4]: G.Li, Y.Gao, **Yuming Li**, Y. Wu. **ThinkLess: A Training-Free Inference-Efficient Method for Reducing Reasoning Redundancy**. *Under Review

[5]: Y. Li, X. Wei, X. Chi, **Yuming Li**, Z. Zhao, H. Wang, N. Ma, M. Lu, S. Zhang. **ManipDreamer: Boosting Robotic Manipulation World Model with Action Tree and Visual Guidance**. *Under Review

[6]: R. Ma, M. Guo, **Yuming Li**, H. Zhang, C. Ma, X. Xie, S. Zhang. **PiGW: A Plug-in Generative Watermarking Framework**. *Under Review

*First author/ Equal contribution

## Technical Skills

**Programming**: Python == C > C++ > Java

**Tools**: Linux, Pytorch, VSCode, Conda, Git, Docker, Ros