Yongqi Chen

yongqich@umich.edu • (734) 389-5157

EDUCATION

University of California, San Diego   **May. 2025 - Present**
- **Research Intern**   San Diego, CA

University of Michigan, Ann Arbor   **Aug. 2023 - Apr. 2025**
- **M.S. in Robotics**   Ann Arbor, MI

Zhejiang University   **Sep. 2019 - Jun. 2023**
- **B.S. in Robotics** (Chu Kochen Honors College)   **GPA:** 3.87/4.0   Hangzhou, China

RESEARCH EXPERIENCE

Research Interests: Fast and efficient video generation; Enabling real-time interactive video generation

Research Intern | University of California, San Diego | Advisor: Hao Zhang   **Nov.2024 - Present**
- Introduced Sliding Tile Attention, a novel sparse attention mechanism to accelerate inference for video generation.
- Propose a new trainable sparse attention-VSA to accelerate large-scale pre-training and inference for video generation; develop an effective strategy for adapting dense attention models to sparse attention.

Research Intern | University of California, San Diego | Advisor: Zhijian Liu   **Nov. 2024 - May. 2025**
- Introduce StreamingVLM, a novel plug-and-play method to accelerate VLM inference in streaming settings, enabling 4x speedup for long-history vision-language-action models for navigation.

Research Assistant | University of Michigan | Advisor: Samet Oymak   **Jan. 2024 - Oct. 2024**
- Explore hybrid architectures for long-context LLM
- Examine the detection of adversarial reasoning errors in LLMs' mathematical reasoning.

Research Assistant | Zhejiang University | Advisor: Yu Zhang   **Jul. 2021 - Mar. 2022**
- Combine saliency maps in Visual SLAM to improve their localization accuracy and robustness in weak texture areas.
- Improve the Lidar-SLAM system's localization accuracy and compress map storage through 2D Image Saliency.

PUBLICATIONS

1. Fast Video Generation with Sliding Tile Attention. ICML 2025
Peiyuan Zhang, **Yongqi Chen**, Runlong Su, Hangliang Ding, Ion Stoica, Zhengzhong Liu, Hao Zhang
2. Faster Video Diffusion with Trainable Sparse Attention. In submission
Peiyuan Zhang*, Haofeng Huang*, **Yongqi Chen***, Will Lin, Zhengzhong Liu, Ion Stoica, Eric P Xing, Hao Zhang
3. Algorithmic Oversight for Deceptive Reasoning. NeurIPS 2024 Workshop
Ege Taga, Mingchen Li, **Yongqi Chen**, Samet Oymak

OPEN-SOURCE PROJECTS

1. Core member of FastVideo

TECHNICAL SKILLS

Programming Languages: Python, C, C++, MATLAB
Tools: Pytorch, ROS, Diffusers
Interest: Basketball, Reading, Travelling, Singing