# Yongqi Chen

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## **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 both training and inference for video generation.

**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

2. Algorithmic Oversight for Deceptive Reasoning. NeurIPS 2024 Workshop

Ege Taga, Mingchen Li, Yongqi Chen, Samet Oymak

3. Scalable Benchmarking and Robust Learning for Noise-Free Ego-Motion and 3D Reconstruction from Noisy Video. ICLR 2025

Xiaohao Xu, Tianyi Zhang, Sibo Wang, Xiang Li, <u>Yongqi Chen,</u> Ye Li, Bhiksha Raj, Matthew Johnson-Roberson, Xiaonan Huang

# **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