ZHUORAN ZHAO

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EDUCATION

The Hong Kong University of Science and Technology Aug 2024 - Present
Ph.D. Candidate in Computational Media and Arts *Guangzhou, China*
The Hong Kong University of Science and Technology Sep 2025 - Present
Visiting Student in HKUST MMLab *Hong Kong*

- **Research Interests**: Video Generation, Human-centric AI
- **Advisors**: Prof. Pan Hui and Prof. Anyi Rao

National University of Singapore (NUS) Jan 2023 - June 2024
Master of Computing, AI Specialization *Singapore*

- **Research Interests**: 3D Human/Hand Reconstruction, Multi-Modal Generation
- **Advisor**: Prof. Angela Yao

South China University of Technology (SCUT) Sep 2017 - June 2021
B.Eng in Software Engineering *Guangzhou, China*

EXPERIENCE

Tencent *LightSpeed Studios* Mar 2026 - Present
Research Intern (*Qingyun Program*) *Shenzhen, China*

- Research on the video diffusion model and interactive video world model.

Sea AI Lab Aug 2023 - Dec 2023
Research Intern *Singapore*

- Research on neural radiance fields to build interactive 3D reconstruction for large-scale scenes.

Gojek June 2023 - Aug 2023
KYC Data Scientist Intern *Singapore*

- Develop the silent face anti-spoofing model for detecting real users or fraud to ensure security during payment process, including data preprocessing, analysis, model training and inference.

Tencent July 2021 - July 2022
Frontend Developer *Shenzhen, China*

- Responsible for the front-end construction of an EDA-based Process Platform from development, testing, deploying, and launching to security management.

Tencent Apr 2020 - Nov 2020
Frontend Development Intern *Shenzhen, China*

- Core developer of DWT, Tencent's web automated testing framework, and its CLI and reporter tools, used by 200+ projects running 136k+ test cases daily.

SELECTED PAPERS

- Junchao Huang, Guian Fang, Shengju Qian, Xianghao Kong, **Zhuoran Zhao**, Wei Huang, Yihua Du, Zixin Zhang, Justin Cui, Yuchao Gu, Yukang Chen, Xinting Hu, Tianyu He, Shaoshuai Shi, Zhuotao Tian, Xin Wang, Mike Zheng Shou, Li Jiang. *SolarWM: Open Data and Scalable Training for Long-Horizon Video World Models.* **Technical Report**, 2026.
- Jinbin Bai, Yu Lei, Qingyu Shi, Aosong Feng, Yi Xin, **Zhuoran Zhao**, Fei Shen, Kaidong Yu, Xiangtai Li. *Threshold-Guided Optimization for Visual Generative Models.* **ICML**, 2026.
- Xianghao Kong, Zeyu Zhang, Yuwei Guo, **Zhuoran Zhao**, Songchun Zhang, Anyi Rao. *Composing Concepts from Images and Videos via Concept-prompt Binding.* **CVPR (highlight)**, 2026.

- **Zhuoran Zhao**, Xianghao Kong, Linlin Yang, Wei Zheng, Pan Hui, Anyi Rao. *Enhancing 3D Hand Reconstruction via Controllable Generation with Semantic and Structural Alignment.* **ICLR**, 2026.
- Qingyu Shi, Jinbin Bai, **Zhuoran Zhao**, Wenhao Chai, Kaidong Yu, Jianzong Wu, Shuangyong Song, Yunhai Tong, Xiangtai Li, Xuelong Li, Shuicheng Yan. *Muddit: Liberating generation beyond text-to-image with a unified discrete diffusion model.* **ICLR**, 2026.
- **Zhuoran Zhao**, Linlin Yang, Pengzhan Sun, Pan Hui, Angela Yao. *Analyzing the Synthetic-to-Real Domain Gap in 3D Hand Pose Estimation.* **CVPR**, 2025.
- **Zhuoran Zhao**, Zhizhuo Yin, Jia Sun, Pan Hui. *Embodied-AI Guided Interactive Digital Teacher for Education* **SIGGRAPH Asia Educator's Forum**, 2024.
- Jiabin Liang, Lanqing Zhang, **Zhuoran Zhao**, Xiangyu Xu. *InfNeRF: Towards Infinite Scale NeRF with O(log n) Rendering Complexity.* **SIGGRAPH Asia**, 2024.
- **Zhuoran Zhao**, Jinbin Bai, Delong Chen, Debang Wang, Yubo Pan. *Taming Diffusion Models for Music-Driven Conducting Motion Generation.* **AAAI Symposia Proceedings, 2023. Best Paper Award.**
- Jiayin Zhu, **Zhuoran Zhao**, Linlin Yang, Angela Yao. *Enhancing 3D Hand Reconstruction from a Single Image via High-Fidelity Texture.* German Conference on Pattern Recognition (**GCPR**), 2023.

ACADEMIC SERVICES

- Reviewer for ICLR, CVPR, AAAI, ECCV, Siggraph Asia, Pacific Graphics

PATENTS

- **CN114546816A**: A front-end testing framework integrating mutation testing to achieve a localized experience with highly integrated mutation testing.

SKILLS

- Computer Skills: Python, PyTorch, PyTorch3D, Blender, NeRF Studio, JavaScript, React, HTML5, CSS, Git
- Language Proficiency: Chinese Mandarin & Cantonese (native); English (Fluent)
- Interests: Piano (Level 10), Badminton