DINGXI ZHANG

ETH Zurich, Zurich, Switzerland

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EDUCATION

ETH Zurich | Dept. Computer Sciences

Zurich, Switzerland

Master of Computer Science

Sep 2024 - Jun 2026 (expected)

• Excellence Scholarship & Opportunity Programme

University of Chinese Academy of Science | Dept. Computer Sciences

Beijing, China

Bachelor of Computer Science

Sep 2020 - Jun 2024

• Overall GPA: 3.97/4.00(1/126)

Major GPA: 3.96/4.00(1/126)

National Scholarship & Outstanding Graduate Student & Outstanding Thesis Awards.

Massachusetts Institute of Technology | Dept. EECS

Cambridge, MA, USA

• Exchange student (GPA: 5.0/5.0)

Brown University | Dept. Computer Sciences

Feb 2023 - May 2023 Providence, RI, US

Visiting student (Host: Interactive 3D Vision & Learning Lab)

Jun 2023 - Oct 2023

PUBLICATION & MANUSCRIPTS

- [1] Xiao-Juan Li, **Dingxi Zhang**, Shu-Yu Chen, Feng-Lin Liu; Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024, pp. 7538-7547. paper link
- [2] **Dingxi Zhang** and Artem Lukoianov. Towards Efficient Local 3D Conditioning. In *SIGGRAPH Asia 2023 Posters*. https://doi.org/10.1145/3610542.3626151. paper link
- [3] **Dingxi Zhang**, Yujie Yuan, Zhuoxun Chen, Fanglue Zhang, Zhenliang He, Shiguang Shan, Lin Gao. StylizedGS: Controllable stylization for 3D Gaussian Splatting. paper link
- [4] Mengying Lin, Shugao Liu, **Dingxi Zhang**, Yaran Chen, Haoran Li, Dongbin Zhao. Advancing Object Goal Navigation through LLM-enhanced Object Affinities Transfer. paper link
- [5] Rao Fu*, **Dingxi Zhang***, Alex Jiang, Wanjia Wu, Daniel Ritchie, Srinath, Sridhar. GigaHands: A Massive Annotated Dataset of Human Bimanual Activities. paper link

RESEARCH EXPERIENCE

3D Vision and Graphics.....

Image-to-4D Synthesis for Character Animation

VAST; UCAS

Guide: Dr. Yanpei Cao, Prof. Lin Gao

Aug 2024 - Now

• Generate consistent and controllable 4D character based on diffusion model.

Stroke-based Facial Appearance Editing in NeRF

Institute of Computing Technology, CAS

Guide: Prof. Lin Gao

Sep 2023 - Nov 2023

- Successfully propose a novel stroke-based 3D facial NeRF editing method to achieve effective
 and precise appearance changes while greatly preserving the original geometry.
- Finishing a technical paper as the second author and was published on CVPR 2024.

Controllable stylization for 3D Gaussian Splatting

Institute of Computing Technology, CAS

Guide: Prof. Lin Gao, Prof. Shiguang Shan

Dec 2023 - Jan 2024

- Successfully propose a novel 3D neural style transfer framework with adaptable control over perceptual factors based on 3D Gaussian Splatting representation.
- Finishing a technical paper as the first author and the paper is under review by TPAMI.

Human Bimanual Manipulation Benchmark

Brown University

Guide: Prof. Srinath Sridhar, Prof. Daniel Ritchie

Jul 2023-Present

- Successfully proposed a diffusion-based text-conditioned generative model for hand motion domain and a 3D hand motion dataset for many generation tasks.
- Finishing a technical paper as the first author and the paper is submitted to CVPR 2025.

Towards Efficient Local 3D Conditioning

MIT CSAIL

Guide: Prof. Vincent Sitzmann

Mar 2023-Aug 2023

- Proposed an innovative locally conditioned approach for shape representation which importantly made use of weight-encoded neural networks.
- Finished a poster paper as the first co-author and it was published on SIGGRAPH Asia 2023.

Design for Synthetic Biology.....

Research on Genetically Engineered Machine

Insititute of Biophysics, CAS

Guide: Prof. Jiangyun Wang

- (2022) FitYo: A Customized Meal Replacements Generator (<u>Project | repo</u>). A portable IoT machine to make meal replacement, an application for our machine & an entertaining science game and a convenient tool for creating wiki.
- (2021) Decaffi: Personalized Caffeine Intake Management Scheme Based on Synthetic Biology (<u>Project | repo</u>). An application Caffeine-monitor to assist users with obtaining a better handle on their caffeine intake amount and an online education platform iGEM EduHub

SELECTED AWARDS AND HONORS

Outstanding Graduate Student	2024
Outstanding Thesis Award	2024
National Scholarship (Awarded to 14 students in the whole school;)	2023
SenseTime Scholarship, SenseTime (30 undergraduate students across the coun	try) 2022
First Prize Academic Scholarship, UCAS (top 1% students)	2021 & 2022 & 2023
National Undergraduate Mathematical Contest in Modeling, Second Prize	2022
International Genetically Engineered Machine Competition, Sliver (2021) & Gold (2022) Award	
Merit Student of Beijing, Beijing (Each year the whole school selects two)	2022
Undergraduate Role Models, UCAS (2 out of 400 students)	2022
International Mathematical Contest In Modeling, Honorable Mentioned	2022
Peak Cup Robot Competition - Model Photoelectric Race, First Prize , Tsinghua University 2018	
TEACHING EXPERIENCE	
Teaching Instructor for Python Language Learning for iGEM	Apr 2022 - Jul 2022
Teaching Assistant for Computer Graphics	Sep 2023 - Feb 2024
Support education teacher, science popularization for children	Sep 2023 - Jun 2024
Leadership	

- Minister of Cooperation Center of Student Union of UCAS (Aug 2021-Jul 2023)
- Team vice captain and software team leader in UCAS iGEM team (Dec 2021 Dec 2022)

ADDITIONAL SKILLS

Programming: Python(proficient), C/C++, Matlab, Latex, HTML, CSS, Javascript, Verilog

Tools: PyTorch, TensorFlow, OpenGL, Vim, Git, Docker, PyGame

Software: Premiere Pro, Adobe Photoshop, After Effects, Indesign, Illustrator, Origin, Blender, Vivado

Language: Native in Mandarin; fluent in English (C1/IELTS 7.5)