

Zhengdong Hong

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EDUCATION

Zhejiang University

Ph.D. in Computer Science, State Key Laboratory of CAD&CG at Zhejiang University

B.Sc. in Electrical and Electronics Engineering; **Rank: 1/48**

Hangzhou, China

Sep 2021 – Jun 2026

Sep 2017 – Jun 2021

Electrical Engineering Excellence Program: I spent 6 days a week in hardware design and debugging laboratory, independently learning and building embedded hardware and software systems.

RESEARCH EXPERIENCE

University of California, San Diego, Prof. Hao Su's Group

Junior Specialist, Research Scholar

UC San Diego, USA

Aug 2023 – Dec 2024

- Lead the dexterous manipulation project *Learning Particle-based World Model from Human for Dexterous Manipulation* in Prof. Hao Su's group.
- Published a first-author IROS 2024 paper *EasyHeC++: Fully Automatic Hand-Eye Calibration with Pretrained Image Models*, advised by Prof. Hao Su.
- Responsible for hardware design and maintenance in Prof. Hao Su's Group since November, 2023.

Zhejiang University

3D computer vision (dynamic scene reconstruction)

Hangzhou, China

Sep 2021 – Aug 2023, Jan 2025 – now

- Independently published a first-author ECCV 2024 paper *Free-Viewpoint Video of Outdoor Sports Using a Flying Camera* [project page](#), which is focused on human pose estimation and 4D scene reconstruction.

AWARDS

Championship in 8th Texas Instruments Electronic Design Competition

Ranking: 1/1847 (TI Cup, Highest Award)

Texas Instruments (TI)

Nov 2020

- In 2020, I lead my team and championed 8th Texas Instruments (TI) Electronic Design Competition, where I lead the whole process of the design and evaluation of Amplifier Nonlinear Harmonic Distortion Analysis System.

PUBLICATIONS

- Zhengdong Hong***, Shenrui Wu*, Haozhe Cui*, Boyi Zhao, Yiyang He, Hangxing Zhang, Ran Ji, Zundong Ke, Jun Wang, Guofeng Zhang, Jiayuan Gu, *R3D: Rethinking 3D Policy Learning*. [project page](#)
- Jingjing Wang, **Zhengdong Hong**, Chong Bao, Yuke Zhu, Junhan Sun, Guofeng Zhang, *LAMP: Lift Image-Editing as General 3D Priors for Open-world Manipulation*. [project page](#)
- Zhengdong Hong***, Yulin Liu*, Haowen Hou, Bo Ai, Jun Wang, Tongzhou Mu, Yuzhe Qin, Jiayuan Gu, Hao Su, *Learning Particle-based World Model from Human for Dexterous Manipulation*, RSS 2025-Dex (Oral). [venue page](#)
- Zhengdong Hong**, Guofeng Zhang, *Learning Object-Centric Motion Priors from Human for Robotic Dexterous Manipulation*, AAAI 2026 (Oral). [project page](#)
- Liangzhi Shi, Yulin Liu, Lingqi Zeng, Bo Ai, **Zhengdong Hong**, Hao Su, *Learning Adaptive Dexterous Grasping from Single Demonstrations*, IROS 2025 (Oral). [project page](#)
- Zhengdong Hong**, *Free-Viewpoint Video of Outdoor Sports Using a Flying Camera*, ECCV 2024. [project page](#)
- Zhengdong Hong***, Kangfu Zheng*, Linghao Chen, Hao Su, *EasyHeC++: Fully Automatic Hand-Eye Calibration with Pretrained Image Models*, IROS 2024 (Oral). [project page](#)

ROBOT SYSTEMS

I have **both software and hardware** skills, which enables me to independently build several complete robot systems for Prof. Hao Su's Lab, including algorithm, hardware and system design. [see details](#).

- Su Lab's first mobile manipulator** equipped with a xArm and an ability hand (onboard power supply).
- Dexterous manipulation platform** with 2 xArm7 and 2 ability hands for articulated object manipulation.

HARDWARE SKILLS

I have plenty of hardware experiences, [see details here](#). Here are some of my hardware skills:

- **Electronics:** electronic design, PCB design, PSpice electronic simulation, power design.
- **Embedded systems:** DSP, PLC, other microcomputers (STM32, MSP430, etc.)
- **Hardware debugging and electronic design for Labs,** [see this document for details](#).