

Chen Feng

CONTACT	University of Hong Kong Phone: +86 13514316622	E-mail: cf24@connect.hku.hk
SUMMARY	Ph.D. student at the University of Hong Kong, advised by Prof. Yi Ma, working on dexterous manipulation, generative robotic simulation, and embodied-agent evaluation. I build real robot systems and benchmarks that connect data collection, policy learning, perception, and closed-loop decision making.	
RESEARCH INTERESTS	Dexterous manipulation, embodied agents, generative simulation, reinforcement learning, and computer vision.	
EDUCATION	The University of Hong Kong Ph.D., HKU Musketeers Foundation Institute of Data Science Tsinghua University (Yao Class) B.S., Institute for Interdisciplinary Information Sciences	Hong Kong, China Sept. 2024 - June 2028 Beijing, China Sept. 2020 - June 2024
HONORS & AWARDS	Gold Medal in National Olympiad in Informatics (NOI2019) Rank 25/600.	2019
PUBLICATIONS	1. Feng Chen^{*†}, Tianzhe Chu*, Li Sun*, Pei Zhou*, Zhuxiu Xu, Shenghua Gao, Yuexiang Zhai, Yanchao Yang, Yi Ma. DexHoldem: Playing Texas Hold'em with Dexterous Embodied System. <i>arXiv: 2605.18727</i>, 2026 2. Zhiao Huang*, Feng Chen*, Yewen Pu, Chunru Lin, Hao Su, Chuang Gan. DiffVL: Scaling Up Soft Body Manipulation using Vision-Language Driven Differentiable Physics. <i>NeurIPS</i>, 2023. 3. Yufei Wang*, Zhou Xian*, Feng Chen*, Tsun-Hsuan Wang, Yian Wang, Katerina Fragkiadaki, Zackory Erickson, David Held, Chuang Gan. RoboGen: Towards Unleashing Infinite Data for Automated Robot Learning via Generative Simulation. <i>ICML</i>, 2024. 4. Feng Chen*, Zhuxiu Xu*, Tianzhe Chu, Xunzhe Zhou, Li Sun, Zewen Wu, Shenghua Gao, Zhongyu Li, Yanchao Yang, Yi Ma. GenDexHand: Generative Simulation for Dexterous Hands. 5. Feng Chen*, Botian Xu*, Pu Hua, Peiqi Duan, Yanchao Yang, Yi Ma, Huazhe Xu. On the Evaluation of Generative Robotic Simulations. <i>arXiv:2410.08172</i>, 2024. 6. Genesis Authors. Genesis: A Universal and Generative Physics Engine for Robotics and Beyond. 7. Li Sun, Jiefeng Wu, Feng Chen, Ruizhe Liu, Yanchao Yang. HyperTASR: Hypernetwork-Driven Task-Aware Scene Representations for Robust Manipulation. <i>CoRL</i>, 2025. 8. Zhihan Cai, Kailu Wu, Dapeng Cao, Feng Chen, Kaisheng Ma. DRAFT: Direct Radiance Fields Editing with Composable Operations. <i>BMVC</i>, 2024. * Equal contribution; † Project leader.	

RESEARCH
EXPERIENCE

Sharpa

June 2026 – Sept. 2026

Research Intern; Mentor: Kaifeng Zhang

- Developing a simulation benchmark for LLM-based robotic agents, evaluating closed-loop perception, planning, and control under constrained observations and tool access.
- Designing evaluation protocols to assess task success, rule compliance, and physical validity across robotic manipulation tasks.

University of Hong Kong

Sept. 2024 - Present

Ph.D. Student; Mentor: Yi Ma

- Co-proposed and led DexHoldem, a real-world Texas Hold'em embodied-system benchmark on ShadowHand/UR10e; built the data-collection infrastructure, maintained the hardware platform, and curated 1,470 teleoperated demonstrations across 14 card and chip primitives.
- Designed DexHoldem's policy, perception, and system-level evaluations, including multi-view observations, 36 structured perception problems, and closed-loop case studies linking scene parsing, action routing, and dexterous policy execution.
- Benchmarked pretrained and from-scratch dexterous policy families (π -series, RDT, diffusion policies, ACT, BAKU), analyzing task completion, scene preservation, data scaling, and real-world failure modes.
- Developed GenDexHand, a generative simulation pipeline for dexterous hands that synthesizes tasks, refines object placements/scales with VLM feedback, and decomposes tasks for sequential reinforcement learning.

Massachusetts Institute of Technology

Feb. 2023 - Aug. 2023

Visiting Student / Research Assistant; Mentor: Joshua Tenenbaum

- Developed DiffVL, a vision-language-driven differentiable physics framework for soft-body manipulation, combining language-conditioned goals with visual observations.
- Built automated robot-task generation pipelines with vision models and LLMs for RoboGen; implemented rendering and simulation components for generative robot learning projects accepted at NeurIPS 2023 and ICML 2024.

Tsinghua University

Aug. 2023 - June 2024

Research Assistant; Mentor: Huazhe Xu

- Designed a comprehensive evaluation framework for generative robotic simulations across quality, diversity, and generalization axes.
- Developed automatic LLM/VLM-based metrics for task realism and trajectory completeness, validated scores against human judgments, and identified low-generalization bottlenecks in current generative simulation pipelines.

PROFESSIONAL
SERVICES

Teaching Assistant

Sep. 2025 - Dec. 2025

HKU DATA8014: Principles of Deep Representation Learning

Reviewer: ICLR 2025, ICLR 2026, ICML 2025.