

Mingjie Zhou

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EDUCATION

Fudan University

B.Eng. in Microelectronics, College of Integrated Circuits and Micro-Nano Electronics

Sep 2022 – Jun 2027

GPA: 96.5/100, 3.86/4.0

- **Selected Coursework:** Mathematical Analysis I & II(A), Statistics(A), Probability and Mathematical Statistics(A-), Data Structures(A+), Python Programming(A), C Programming(A), Introduction to Embodied Intelligence(A).
- Majoring in Clinical Medicine from Sep 2022 to May 2023 before transferring to Microelectronics.

RESEARCH INTERESTS

Robot Learning, Dexterous Manipulation, Robotic Foundation Models, Reinforcement Learning, World Model, Continual Learning

PUBLICATIONS

Authors marked with * contributed equally. Authors marked with † are corresponding authors.

FTP-1: A Generalist Foundation Tactile Policy Across Tactile Sensors for Contact-Rich Manipulation

Chengbo Yuan*, Zicheng Zhang*, Mingjie Zhou*, Wendi Chen, Yi Wang, Zhuoyang Liu, Dantong Niu, Shuo Wang, Hui Zhang, Wenkang Zhang, Yingdong Hu, Yuanqing Gong, Wanli Xing, Chuan Wen, Cewu Lu, Kaifeng Zhang†, Yang Gao†
In Submission, 2026.

SynManDex: Human-like Dexterous Grasping from Synthetic Human Priors

Yanming Shao*, Zanzin Chen*, Wenwei Lin*, Mingjie Zhou*, Tianxing Chen, Xiaokang Yang, Yichen Chi, Yao Mu†
In Submission, 2026.

AnalogSeeker: An Open-source Foundation Language Model for Analog Circuit Design

Zihao Chen*, Ji Zhuang*, Jinyi Shen, Xiaoyue Ke, Xinyi Yang, Mingjie Zhou, Zhuoyao Du, Xu Yan, Zhouyang Wu, Zhenyu Xu, Jiangli Huang, Li Shang, Xuan Zeng, Fan Yang†
ACM Transactions on Design Automation of Electronic Systems (TODAES), 2026.

RESEARCH EXPERIENCE

Tsinghua IIIS / Sharpa Robotics

Undergraduate Research Assistant & Robotic Algorithm Intern

Dec 2025 – Present

Advisor: Yang Gao

- **Project: Tactile-Driven Robotic Foundation Policy for Contact-rich Manipulation**
- Building a large-scale **tactile-powered robotic foundation Policy** for contact-rich dexterous manipulation. Integrated high-resolution tactile sensing with visual inputs to enable fine-grained manipulation.
- Designed and defined the core architectures for the **Function-Aligned Action Space(FAAS) and Tactile Function Area**, establishing the framework for processing multimodal tactile inputs.
- Leading the **pre-training of the foundation model**, engineering robust **data processing pipelines** and **optimizing data recipe** to enhance model generalization and learning efficiency across diverse manipulation tasks and hardware settings.

Shanghai Jiao Tong University / Shanghai AI Lab

Undergraduate Research Assistant

Sep 2025 – Dec 2025

Advisor: Yao Mu

- **Project: Human-like Dexterous Grasping Data Generation and Evaluation**
- Generated HOI (Human-Object Interaction) simulation trajectories for human hand MANO models and 3D object models using Diffusion Models.
- **Retargeted pre-grasping frames to the XHAND dexterous hand** and obtained final grasping data through optimization.
- Evaluated grasping stability in a multi-contact dynamics system.

State Key Lab of Integrated Circuits and Systems, Fudan University

Undergraduate Research Assistant

Feb 2025 – Sep 2025

Advisor: Fan Yang

- **Project: Analog Circuit Design Automation Based on LLM Reinforcement Learning**
- Created a reinforcement learning training dataset tailored for specific LLM tasks. Cold-started the base model via SFT (Supervised Fine-Tuning) and applied the GRPO algorithm for RL training.
- Enhanced LLM performance on analog circuit Q&A benchmarks by **introducing softmin inter-group weights to the GRPO algorithm** to improve advantage calculation and **data utilization efficiency**.
- Implemented the training pipeline based on the Llama-factory and **VeRL frameworks**.

AWARDS & HONORS

National Scholarship (Top 0.1%, China's mainland)	2024-2025
National Scholarship (Top 0.1%, China's mainland)	2022-2023
Shanghai Government Scholarship(Top 0.1%, Shanghai, China)	2023-2024
Second Prize, 9th National University Student Integrated Circuit Innovation Competition	08/2025
Second Prize (Shanghai Division), Contemporary Undergraduate Mathematical Contest In Modeling	09/2025
Second Prize (Shanghai Division), Mathematics Competition of Chinese College Students	12/2024
Second Prize (Zhejiang Province), Chinese Physics Olympiad	12/2021

SKILLS

Programming Languages: Python, C, C++
Python Frameworks: PyTorch, TensorFlow, VeRL, Llama-factory
Softwares and Tools: Git, LaTeX, Docker, ROS, Sapien