Yufu Dong

dpthink.vercel.app — yf_dong@mail.nankai.edu.cn — GitHub: DeepforThink — +86 187-8120-7333

Education

Nankai University
B.Eng. in Intelligence Science and Technology (in progress) *Sept. 2023 - Jun. 2027*

- **GPA:** 3.64/4.0; **Rank:** 33/166 (top 19.8%); **English:** CET-4 580, CET-6 525.
- **Relevant Courses:** Machine Learning (4.0), Deep Learning (4.0), Machine Vision (4.0), Principles of Automatic Control (4.0), Modern Control Theory (4.0), Artificial Intelligence Technology (4.0), Digital Electronics (4.0).
- **Self-study:** MIT 6.S978 Deep Generative Models, MIT 6.S184, UC Berkeley CS285, and Mathematical Principles in Reinforcement Learning (Westlake University); notes are maintained on my personal website.
- **Research Interests:** Embodied intelligence, robotic manipulation learning, VLA models, world models, generative policy learning, and multimodal perception-control.

Research Experience and Projects

Imitation and Reinforcement Learning with Force Feedback for Precision Robotic Grasping *Mar. 2025 - Mar. 2026*
Project Lead, Nankai Hundred Projects Undergraduate Research Program

- Studied force-feedback control for precision grasping by combining imitation learning and reinforcement learning, aiming to improve real-world latency, stability, and generalization in contact-rich manipulation.
- Analyzed the inference bottleneck of MeanFlow-style generative action policies under high-frequency control and explored one-step action generation to reduce latency; project funded by Nankai University and closed with an excellent evaluation. Code: github.com/DeepforThink/imeanflow-robot-arm.

Home-Service Robot System *Mar. 2025 - May 2025*
Project Lead

- Built a ROS/TurtleBot-based service robot integrating speech interaction, navigation, obstacle avoidance, visual recognition, and robotic-arm grasping for home-service scenarios.
- Implemented MoveBase navigation and static-map construction, trained and deployed YOLOv5 object recognition on a self-labeled household-object dataset, and designed the ROS communication architecture connecting speech, perception, navigation, and execution.

Long-Horizon VLA Evaluation on CALVIN ABC→D *May 2026*
Project Member

- Participated in StarVLA-based training and evaluation for CALVIN ABC→D cross-environment generalization; organized training schemes, evaluation metrics, and failure-pattern analysis.
- Designed LIBERO data augmentation with action-consistent weak visual augmentation and language paraphrasing, and conducted failure-aware finetuning from CALVIN ABC Eval logs through high-failure task resampling, failure-prefix augmentation, and task-level reweighting.

VLA and Generative Policy Reading and Reproduction *2024 - Present*
Independent Research Preparation

- Systematically studied PI-series VLA papers and reproduced representative manipulation policies, including ACT, Diffusion Policy, and PI/OpenPI, on a small robotic-arm platform using open-source implementations.

Awards

National Third Prize, RoboCup China 2025, RoboCup@Home League (Team Lead) *2025*
Nankai Gongneng Scholarship, First-Class University Comprehensive Award (Top 5%) *2024 - 2025*
Nankai University Merit Student *2024 - 2025*
Provincial Second Prize, China Undergraduate Mathematical Contest in Modeling *2025*

Additional Experience

Rovren America *Sept. 2024 - Oct. 2024*
Technical Communication Intern

- Participated in technical communication and coordination for a computer-vision education platform.

Skills

Programming and ML Python, C++, PyTorch, Hugging Face, Linux/WSL2
Robotics and Vision ROS, OpenCV, YOLOv5, ACT, Diffusion Policy, PI/OpenPI, manipulation policy reproduction
Research Practice literature review, baseline reproduction, experiment logging, failure-case analysis, technical writing