Xun Yang (Kyrie)

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1st Du Xue Rd, Nansha District, Guangzhou, Guangdong, China

Education

University of Oxford — Oxford, UK
*Visiting Student, ARG, Oxford Robotics Institute, Supervised by **Prof. Ioannis Havoutis*** — *Aug 2026 - Dec 2026*

Hong Kong University of Science and Technology — Guangzhou, China
*M.Phil. in Artificial Intelligence, Information Hub, Supervised by **Prof. Junwei Liang*** — *Aug 2024 - Oct 2026*

Harbin Institute of Technology — Shenzhen, China
B.Eng. in Automation, School of Mechanical Engineering and Automation — *Sep 2020 - Jun 2024*

- *Exchange:* Innobay Bootcamp, Division of Integrative Systems and Design, **HKUST** (Jun 2024 - Jul 2024)
- *Exchange:* Oxford Prospects Program, Pembroke College, **University of Oxford** (Jan 2024 - Feb 2024)

Publications

[1] Zhihao Tian*, Zifan Wang*, Enzheng Zhu, **Xun Yang**, Jialong Qin, Mengbo Wang, Junwei Liang, ATHLETE: Learning Reactive Humanoid Tennis via Trajectory-Guided Motion Matching — *Under Review* [Project] [arXiv] [PDF]

[2] **Xun Yang**, ..., Junwei Liang, "One Motion, Diverse Strokes: A Kinematics-Aware Adaptive Event Prior for Vision-Guided Humanoid Tennis Striking" — *Under Review*

[3] Zifan Wang*, **Xun Yang***, ..., Junwei Liang, "End-to-End Humanoid Robot Safe and Comfortable Locomotion Policy" — [Project] [arXiv] [PDF]

[4] Yufei Jia, ..., **Xun Yang**, ..., Guyue Zhou, "GS-Playground: A High-Throughput Photorealistic Simulator for Vision-Informed Robot Learning" — ***RSS 2026*** [Project] [arXiv] [PDF]

[5] Zifan Wang, Teli Ma, Yufei Jia, **Xun Yang**, ..., Junwei Liang, "Omni-Perception: Omnidirectional Collision Avoidance for Legged Locomotion in Dynamic Environments" — ***CoRL 2025 (Oral, Top 5%)*** [Project] [arXiv] [PDF]

Research Experience

CatchItMan: Perception-Driven Humanoid Bimanual Catching [Demo] — Ongoing

- Developing a whole-body RL framework for dynamic single-handed and bimanual ball catching on humanoid robots
- Integrating depth-based perception / MoCap, ball trajectory prediction, policy distillation, and sim2real transfer.

MultiMimic: Multi-Robot Collaborative Loco-Manipulation via Differentiable World Model — Ongoing

- Learning coordinated multi-humanoid behaviors through multi-agent motion imitation for collaborative loco-manipulation tasks.

APOLLO: Adaptive Perception-driven cOntrol for Long-horizon Loco-manipulation [Demo]

- Developed a hierarchical RL framework integrating exteroceptive vision with whole-body control for autonomous humanoid loco-manipulation tasks.

A Human-Centric Whole-Body Teleoperation Framework for Unitree G1 [Demo]

- Built a whole-body teleoperation system for the Unitree G1 humanoid robot using Apple Vision Pro.

Undergraduate Research in Bio-Sensing / Robotic Mechanism Design
Research Assistant (Supervisors: Prof. Zhiyong Wang / Prof. Yangkun Zhang) — *Oct 2023 – May 2024*

Work Experience

Kinetix AI Shenzhen, China

Reinforcement Learning Algorithm Intern *May 2026 - Aug 2026*

- Developed Flow Matching policies for whole-body control on full-size humanoid robots.
- Built policy distillation pipeline to compress multiple expert robot policies into single deployable model.

Guangdong Robot Storm Co., Ltd. Shenzhen, China

Robot Algorithm Engineer Intern *Mar 2024 - Jun 2024*

- Developed an LLM-powered Whole-Body-Massage Robot using tactile sensors and hybrid force/position control.
- Demonstrated the system at Miracle Plus (Beijing), successfully contributing to securing a major investment round.

Shenzhen Novoage Energy Technology Co., Ltd. Shenzhen, China

Embedded Software Engineer Intern *Jul 2023 - Oct 2023*

- Optimized communication protocols among BMS, ARM boards, and PCs.

Technical Skills

Programming & Frameworks: Python, C++, C, PyTorch, Isaac Lab, MuJoCo, MJLab, ROS, Isaac Gym, Genesis
Methods: PPO, AMP, DAgger, Teacher-Student Distillation, DeepMimic, SuperMimic, GVHMR, GMR, IK, FK
Robotics Hardware: Unitree G1/Go2/H2, Dex3 Hands, UFactory xArm, Vicon/OptiTrack, Livox Mid-360, RealSense D455, 6D F/T Sensors, Apple Vision Pro

Awards & Professional Communication

- **Awards:** Outstanding MPhil Graduation Project (2026), Full Postgraduate Studentship (2024-2026), Innovation Special Prize (2025), Best Oral Presentation Award (Top 2%, 2025), Most Innovative Award (Innobay, 2024).
- **Community:** Producing **Isaac Lab** tutorials on Bilibili (3k subs, 100k+ views). Delivered simulation tutorials during HKUST Orientation (2025).

Extracurricular Life

President of English Association of HIT Jul 2021 - Sep 2023

- Led a 400+ member club; organized 20+ English Corners and co-founded the regional English Association League with THU and PKU graduate clubs.