

Yidong Jiang

Email: jiangyidong9343@gmail.com/yyydddd@mail.ustc.edu.cn

Education

University of Wisconsin - Madison, WI United States	Aug. 2025 - expected Jun. 2026
Visiting International Student	
Advisor: Prof. Xiaobin Xiong , Humanoid Robotics	
Macmaster University, Ontario Canada	Jun. 2024 - Sep. 2024
Summer Visiting Student	
Advisor: Prof. Rong Zheng , Mobile Computing	
University of Science and Technology of China, Hefei China	Sep. 2022 - expected Jul. 2026
Bachelor of Science in Data Science	
Advisor: Prof. Yanyong Zhang (IEEE Fellow), Perception	
Core Courses: Computer programming (A); Electromagnetism (A); Complex Analysis (A-); Summer Internship (A); Machine Learning (A-); Deep Learning (A-)	

Research Experience

Whole-Body Robot Teleoperation via Vive VR	Aug..2025 - Present
Advisor: Prof. Xiaobin Xiong (ME, UW - Madison)	
<ul style="list-style-type: none">Developed a teleoperation platform integrating Vive VR and a Piper robotic arm, enabling real-time human-robot control and data collection.Achieved low-latency, high-synchronization performance between human motion and robotic execution.Currently extending the system to whole-body teleoperation on Vive-G1 for motion mapping.Open-sourced the whole body teleoperation code on GitHub for public use and reproducibility. [code]	
3D-UKF-Based Multi-Drone Tracking for noised environment UAV Perception	Spt. 2024 - Jul. 2025
Advisor: Prof. Yanyong Zhang (Computer Science, USTC)	
<ul style="list-style-type: none">This project involves reduce environmental noise and creating a 3D-UKF structure and using IMM-UKF to track drones.The proposed method improves the signal-to-noise ratio (SNR), leading to higher UAV detection rates and accuracy.Core contributor of <i>BSense: Wide-Area UAV Detection and Localization with 5G-Advanced Base Station</i>. Submitted to MobiCom 2026, September 3, 2025.	
Radar-Based Sleep Safety and Health Monitoring Using Machine Learning	Jun. 2024 - Present
Advisor: Prof. Rong Zheng (Computing and Software, McMaster University)	
<ul style="list-style-type: none">Leading author. Designed and developed a radar-based system for sleep mnnitoring using machine learning, reducing reliance on wearable sensors.Processed heart rate, respiration, and motion signals to classify sleep stages via a rule-based decision treePreparing for journal submission.	
Monte Carlo Tree Search for Strategic Card Game Optimization	May 2024 - Sept. 2024
Advisor: Prof. Kani Chen (Financial Mathematics, HKUST)	
<ul style="list-style-type: none">Developed an AI agent for the strategic card game Guandan, integrating teaching and gameplay.Designed a reinforcement learning framework based on the Deep Monte Carlo model to learn optimal strategies and adapt to complex multi-agent interactions.Achieved a win rate of 70%, demonstrating strong performance in high-dimensional decision spaces.Explored Monte Carlo Tree Search for improved adaptability, revealing scalability challenges inherent to high-dimensional combinatorial games	

Skills

Computer Skills: C; C++; Python (PyTorch); Compiler; Latex; ROS2
English Proficiency: TOEFL 95 (R 28; L 22; S 23; W 22;)
Active in Github and Huggingface

Awards

USTC Fellowship(top 25%)	2024
Best Improvement Scholarship(top 30%)	2023
Outstanding Freshman Scholarship	2022