Linhao Bai

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EDUCATION

Georgia Institute of Technology   Atlanta, GA
*Master of Science in Computer Science, **GPA: 4.0***   *Aug. 2024 – May 2026*
- Relevant Coursework: **CS7638 AI for Robotics(A)**

Chongqing Jiaotong University   Chongqing, China
Bachelor of Engineering in Civil Engineering   *Sep. 2018 – June 2022*

EXPERIENCE

SEER Robotics   June 2023 – July 2024
Project Manager   *Shanghai*
- Managed technical support for **35** international clients, resolving critical issues and streamlining project delivery
- Led technical operations at international trade shows, setting up booths, demonstrating products, and gathering market intelligence
- Collaborated with URG engineers in Germany to develop a safety service type mobile robot prototype within **7 days** from scratch, demonstrating adaptability and technical capability
- Contributed to groundwork for potential **multi-million** contracts with Tesla and URG, supporting long-term collaborations

SEER Robotics   June 2022 – July 2023
Software Engineer   *Shanghai*
- Designed and developed a robot auxiliary system using the Qt framework, incorporating a file system for efficient data management, a secure network system for reliable communication, and integrated customer authorization system
- Developed plugins for the main robot ROS like system, leveraging Protocol Buffers (Protobuf) for efficient inter-service communication

PROJECTS

Safety AMR Project for Tesla   Nov 2023 – July 2024
Project Engineer   *Austin, USA*
- Led the Autonomous Mobile Robot (AMR) project from initiation to U-certification design phase for Tesla in Austin, ensuring strict safety, reliability, and performance standards.
- Supervised POC robot manufacturing, coordinated UL certification process, and managed transition to full-scale production while maintaining high-quality standards.
- Oversaw logistics, on-site acceptance testing, and implementation of SOPs for AMR deployment in Tesla's Gigafactory, ensuring operational integration and performance optimization.

Dexterous Manipulation Research at STAR Lab, Georgia Tech   Sep 2024 – Present
Research Assistant   *Atlanta, GA*
- Developed a ROS-based hardware control framework integrating Kinova arm, PSYONIC hand, Allegro hand, and LeapHand for dexterous manipulation tasks.
- Implemented reinforcement learning with IsaacGym and PPO for in-hand rotation tasks, utilizing domain randomization and domain adaptation to achieve sim-to-real transfer, successfully deploying on the Allegro hand.
- Explored Koopman operator-based methods as a replacement for the policy actor, improving control efficiency and interpretability in robotic manipulation.

SKILLS

Programming Languages: Python, Java, C++, Go, JavaScript
Frameworks & Libraries: Qt, Django, Flask, ROS, Pytest, PyTorch, Scikit-learn, NumPy, Pandas
Big Data & Distributed Systems: Kubernetes, Docker, Hadoop, Spark, Flink
Databases & Caching: MySQL, PostgreSQL, Redis
Web Development: RESTful APIs, HTML, CSS, JavaScript
Other Skills: Git, GitHub, Linux