Qiandao Liu

Cornell University, Ithaca, NY · ql342@cornell.edu · GitHub

Education

Cornell University — Aug 2023 – Dec 2026 (Expected)
B.S. in Computer Science, Robotics Minor · GPA: 3.82 — Ithaca, NY

– Coursework: Independent Research (CS 4999), Robot Learning (CS 4756), Foundation of Robotics (CS 4750), Optimization Methods for Robotics (CS 5757), Fast Robot (CS 4190), Autonomous Mobile Robotics (CS 4180)

Research Interests

My research lies at the intersection of robotics, learning, and control. I am focused on enabling robots to perform useful tasks with adaptability, agility, generalizability, and safety, utilizing learning-based methods that scale with data and computation.

Research Experience

Cornell EmPRISE Lab — May 2024 – Present
Research Assistant · Advisor: Tapomayukh Bhattacharjee — Ithaca, NY

Cornell Praxis Lab — Aug 2025 – Dec 2025
Research Assistant (Rotation) · Advisor: Preston Culbertson — Ithaca, NY

Projects

RoboWear: Long-horizon Dressing with T-shirts using Learned Cloth Bunching and Force-limited Diffusion Policies
Pranav Thakkar, **Qiandao Liu**, Rolando Rodríguez, Keya Aggarwal, Shengmiao Jin, Tapomayukh Bhattacharjee
Under Review RSS 26 — EmPRISE Lab, Cornell

RAG-Diff: Adapting Diffusion Policies to Dynamic Constraints with Retrieval-Augmented Guidance
Ruolin Ye, Sarah Ha, Shuaixing Chen, **Qiandao Liu**, Gavin Chen, Shaoyang Stassen, Mark Zolotas, Jose Barreiros, Tapomayukh Bhattacharjee
Under Review RSS 26 — EmPRISE Lab, Cornell

Foundation Model for Robot Assistant Care-giving
Authors TBA
In Submission CoRL 26 — EmPRISE Lab, Cornell

Honors & Awards

2024 Cornell BURE Program with $7,000 research stipend
2024 Cornell RCareWorld Hackathon – 2nd Place
2023 Cornell AppDev Hackathon – Best Backend

Teaching Experience

CS 4750: Foundation of Robotics · Teaching Assistant — Aug 2025 – Dec 2025
CS 1110: Introduction to Computing · Teaching Assistant — Feb 2024 – May 2024

Skills

Robot: Franka Emika Panda, Franka Research 3, Kinova Gen3, UR5e
Platforms: Mujoco, Isaac Sim
Programming: Python, Java, C++, C#, R, SQL, Linux, MATLAB, Swift, HTML/CSS/JS
Frameworks: PyTorch, TensorFlow, NumPy, OpenCV, ROS, ROS2, Nvidia Warp