

Chunyu Jiang

cyjjiang@seas.upenn.edu | [chunyu-jiang.github.io](https://github.com/chunyu-jiang) | [LinkedIn](#)

EDUCATION

University of Pennsylvania | Philadelphia, PA

Aug 2025 – May 2027 (expected)

Master of Science in Engineering in *Robotics*

GPA: 3.77/4.00

Tongji University | Shanghai, China

Sep 2021 – Jun 2025

Bachelor of Engineering in *Mechatronics Engineering*

GPA: 90.34/100 (Rank 2)

PUBLICATIONS

* equal contribution

Residual Compliant Policy: Learning Compliant Policies from Few Demonstrations

Chunyu Jiang*, Yichen Cai*, Shuai Li, Wenbin Sun, João Carvalho, Kostas Daniilidis, Oleg Arenz, Cristiana de Farias, Jan Peters

Under review, 2026 [\[Project Page\]](#)

Learns compliant contact-rich manipulation from 7 teleoperated demonstrations via simulation augmentation (Laplacian editing + trajectory optimization), a flow-matching policy commanding an admittance controller, and residual RL. 40/40 out-of-distribution real-robot successes vs. 33/40 for an adaptive-compliance baseline.

HandMimic: Learning Dexterous Manipulations from Videos

Zhuoyang Pan, Yunzhou Song, **Chunyu Jiang**, Junyao Shi, Jiahui Lei, Kostas Daniilidis

Under review, 2026

Learns dexterous manipulation from monocular human videos by treating the reconstructed hand-object interaction as an imperfect reference for RL in simulation, practiced across generated “digital siblings” of the object. 85.7% success vs. 35.4% for ManipTrans from reconstructed demonstrations; 56/60 real-world replays on a KUKA iiwa 7 + XHand.

RESEARCH EXPERIENCE

GRASP Lab, University of Pennsylvania | Philadelphia, PA

Oct 2025 – present

Research Assistant, advised by **Prof. Kostas Daniilidis** and **Prof. Nadia Figueroa**

- Built a vision-based arm-hand teleoperation and multimodal data-collection system for a KUKA iiwa 7 with a tactile XHand (iPhone VIO for the arm, camera-based AnyTeleop for the hand).
- Contributed to HandMimic (under review) on learning dexterous manipulation from human videos.
- **Master’s thesis (ongoing):** compliant policies for forceful tool use with a dexterous hand, where both the arm (impedance control) and the hand (fingertip tactile sensing) regulate contact force.

Intelligent Autonomous Systems Group, TU Darmstadt | Darmstadt, Germany

May 2026 – Sep 2026

Visiting Student Researcher, hosted by **Prof. Jan Peters**

- Co-first author of Residual Compliant Policy (under review): built the admittance-control execution stack, the simulation data-augmentation pipeline, the flow-matching compliant base policy, and the residual RL policy trained in Newton.
- Evaluated over 520 real-robot trials on a Franka FR3: 40/40 out-of-distribution successes vs. 33/40 for Adaptive Compliance Policy and 24/40 for Laplacian-editing augmentation.

PROJECTS

Autonomous Drone Racing with Reinforcement Learning | UPenn

2026

Trained a quadrotor policy with RL in Isaac Lab to race through a track at high speed, then deployed it on a real drone.

Low-Cost Teleoperation System for Robot Manipulation | Tongji University

2024

Built a low-cost teleoperation system (sensorized 3D-printed leader arm, KUKA follower), collected RGB and proprioceptive data, and trained an ACT policy that grasps and assembles workpieces on the real robot.

INDUSTRY EXPERIENCE

Volkswagen Commercial Vehicles, Volkswagen Group | Wolfsburg, Germany

Mar 2025 – Jun 2025

Intern, NE-GI/T

HONORS & AWARDS

Outstanding Graduate of Tongji University (Top 5%), 2025

DAAD Scholarship (Ranked 1st), 2024

Outstanding Student of Tongji University (Top 5%), 2023

Klaus Fischer Scholarship (Top 10%), 2024

Tongji University First-Class Scholarship (Top 10%), 2023

SKILLS

Programming: Python, C++, C, MATLAB

Learning & Simulation: PyTorch, ROS 2, Isaac Lab, Newton, MuJoCo

Hardware & Control: Franka FR3, KUKA iiwa 7, XHand, DexUMI, Haption Virtuouse 6D, F/T sensors, admittance/impedance control, 3D printing

Languages: Chinese (native), English (proficient), German (proficient, TestDaF 20/20)