

Education

Stanford University - Sep 2023 - Current
Student of New Faculty (SNF) in Electrical Engineering
Robotics and Embodied Artificial Intelligence Lab, [Shuran Song](#)

Columbia University - Jan 2021 - Current
Ph.D. candidate in Computer Science
Columbia Artificial Intelligence and Robotics Lab, [Shuran Song](#)
GPA: 4.02/4.0

Publications

Universal Manipulation Interface

ArXiv Preprint [Webpage](#)

Cheng Chi, Zhenjia Xu, Chuer Pan, Eric Cousineau, Ben Burchfiel, Russ Tedrake, Shuran Song

Diffusion Policy: Visuomotor Policy Learning via Action Diffusion

2023 Robotics: Science and Systems (RSS) [Webpage](#)

Cheng Chi, Siyuan Feng, Yilun Du, Zhenjia Xu, Eric Cousineau, Ben Burchfiel, Shuran Song

RoboNinja: Learning and Adaptive Cutting Policy for Multi-Material Objects

2023 Robotics: Science and Systems (RSS) [Webpage](#)

Cheng Chi, Benjamin Burchfiel, Eric Cousineau, Siyuan Feng, Shuran Song

Cloth Funnels: Canonicalized-Alignment for Multi-Purpose Garment Manipulation

2023 International Conference on Robotics and Automation (ICRA) [Webpage](#)

Alper Canberk, **Cheng Chi**, Huy Ha, Ben Burchfiel, Eric Cousineau, Siyuan Feng, Shuran Song

Iterative Residual Policy

for Goal-Conditioned Dynamic Manipulation of Deformable Objects

2022 Robotics: Science and Systems (RSS) [Webpage](#)

Cheng Chi, Benjamin Burchfiel, Eric Cousineau, Siyuan Feng, Shuran Song

★ *Best Paper Award* ★ ★ *Best Student Paper Award Finalist* ★

DextAIRity: Deformable Manipulation Can be a Breeze

2022 Robotics: Science and Systems (RSS) [Webpage](#)

Zhenjia Xu, **Cheng Chi**, Benjamin Burchfiel, Eric Cousineau, Siyuan Feng, Shuran Song

★ *Best Systems Paper Award Finalist* ★

GarmentNets: Category Level Pose Estimation for Garments via Canonical Space Shape Completion

2021 The International Conference on Computer Vision (ICCV) [Webpage](#)

Cheng Chi, Shuran Song

Occlusion-robust Deformable Object Tracking without Physics Simulation

2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)

Cheng Chi, Dmitry Berenson [Webpage](#)

Awards

2022 Robotics: Science and Systems (RSS) [Webpage](#)

★ *Best Paper Award*

★ *Best Student Paper Award Finalist*

★ *Best Systems Paper Award Finalist*

Awards

2023 Nvidia Graduate Fellowship Finalist [Webpage](#)

Industry Experience

Toyota Research Institute - Jun 2023 - Aug 2023

Research Intern @ Large Behavior Model Team

- Developed [Universal Manipulation Interface](#) for large-scale in-the-wild data collection

Toyota Research Institute - Jun 2022 - Aug 2022

Research Intern @ Robotics Intuitive Physics Team

- Studied imitation learning methods for contact-rich tasks
- Built real-time control systems for robotics with GPU policy in-the-loop

Nuro Inc - Jan 2020 - Jan 2021

Software Engineer, Autonomy @ Mapping and Localization Team

- Developed mapping and localization system for Nuro's autonomous delivery vehicles

Apple Inc - May 2019 - Aug 2019

Engineering Intern @ Camera Architecture Team

- Developed software for simulating future camera systems

Uber Technologies - May 2018 - Jul 2018

Software Engineering Intern @ Maps Imagery Research Team

- Developed an unsupervised learning algorithm to cluster and filter GPS trails
- Researched improving image-based SLAM with semantic segmentation

Services

Technical Paper Reviewer

- International Conference on Intelligent Robots and Systems (IROS)
- International Conference on Robotics and Automation (ICRA)