Zhiyuan Chen

SUSTech

Department of Electrical and Electronic Engineering Southern University of Science and Technology ⋈ 12132111@mail.sustech.edu.cn ⊠ zychen_chn@outlook.com

Education

2021/9- Master of Engineering, Electronics Science and Technology, Department of Electripresent cal and Electronic Engineering, Southern University of Science and Technology (SUSTech), Shenzhen, China.

- o Advisor: Dr. Max Q.-H. Meng
- Robotic Manipulation and Deep Learning
- Accumulative GPA: 3.59/4.0 • Accumulative Score: **90.8**/100
- Ranking: 12/52 (top 23%)
- 2021/3-5 **Visiting Students**, Department of Electrical and Electronic Engineering, SUSTech, Shenzhen, China.
 - 2017/9- Bachelor of Engineering, Electronic Information Engineering, School of Electronic 2021/6 Engineering, Xidian University, Xi'an, China.
 - Accumulative GPA: 3.7/4.0 • Accumulative Score: **86.2**/100 • Ranking: 27/226 (top 12%)

Article

† indicates equal contribution, and * indicates corresponding authorship.

Journal Article

2023 Peng Xu[†], **Zhiyuan Chen**[†], Jiankun Wang and Max Q.-H. Meng^{*}, Planar Manipulation via Learning Regrasping, IEEE Transactions on Automation Science and Engineering **(T-ASE)** – Under Review.

[Project][DataSet][Paper]

Research Experience

Shenzhen Key Laboratory of Robotics Perception and Intelligence, SUSTech

2022-present **Robotic Manipulation via Learning Regrasping**.

- Aiming to facilitate planar manipulation tasks with regrasping, which often requires generating intermediate placement locations for the object being manipulated.
- o Proposed a pipeline with the stages of orientation generation, position refinement, and placement discrimination to obtain accurate and diverse stable placements based on the perception of point clouds.
- o A large-scale dataset is created for training, including simulated placements and contact information between objects and the plane.

Advisor Dr. Max Q.-H. Meng, Department Head, Chair Professor, Department of Electronic and Electrical Engineering, SUSTech

Honors and Awards

- 2019 **National Second Prize**, the "Challenge Cup" National College Students Extracurricular Academic and Scientific Works Competition.
- 2018 **Principal Prize Scholarship**, *Xidian University*, *Xi'an*, *China*.

Robotic and Computer Vision Skills

Programming Skills: Python, PyTorch, Tensor, Matlab Robotic Technologies: PyBullet, Franka Panda, ROS Computer Vision Technologies: open3d, torch3d, opencv

Teaching Assistant

Spring, 2023 **EEE5058: Foundation of Information Technology**, SUSTech.

Robotic Motion Planning