

Sim-Suction Code Repository

Author of Code: Juncheng Li

Mentor / Area of Expertise: David J. Cappelleri / Robotic Grasping

Level of programming difficulty: Understanding of Deep Learning Framework

Skills/Tools required: Nvidia Isaac Sim Simulator, PyTorch

Summary: Sim-Suction-API offers a simulation framework to generate synthetic data and train models for robotic suction grasping in cluttered environments.

GitHub Link: <https://github.com/junchengli1/Sim-Suction-API/>

Documentation: <https://junchengli1.github.io/Sim-Suction/>

Title of Paper: Sim-Suction: Learning a Suction Grasp Policy for Cluttered Environments Using a Synthetic Benchmark, IEEE Transactions on Robotics

Authors of Paper: Juncheng Li, David J. Cappelleri

Link to Paper: <https://doi.org/10.1109/TRO.2023.3331679>