

ME336 Collaborative Robot Learning

Song Chaoyang

Assistant Professor

Department of Mechanical and Energy Engineering

songcy@sustc.edu.cn

Agenda

Week 07, DAY, DATE

- Project2: Picking Robot with Vision
 - Project2 Introduction
 - Hands-on Lab

Project2 Introduction

Scene

- Robot arm: Aubo, UR, Franka
- Hand: suction cup
- Camera: Realsense 430
- Picking items: each group choose their own items to be picked

Hands-on Lab

Pipeline of Building A Picking Robot with Vision

1. (Completed) ROS communication with robot arm, gripper, and camera
2. (Completed) Image processing: locate the picking items in the image
3. (To be Completed) Hand-eye calibration
4. (To be Completed) Write a python script to move the arm and pick the items with Moveit.
5. Codes: <https://github.com/ancorasir/BionicDL-CobotLearning-Project2.git>