Estimating Pose of Object and Manipulator Grasping Control

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- Using the RANSAC algorithm and affine invariant principle to filter out false match pairs based on GMS algorithm.

- Combined with depth image, The least square SVD method is used to solve the rotation and translation matrix of the object. We use this matrix to estimate the pose of object.

- The control of the end effector based on the projection angle has good experimental results

(a) Recall

(b) Precise

(c) Mean square error

(d) F1 Score