

Our team is from the Machine Intelligence Lab of Peking University in China, including a senior year student and a guiding Phd. Our research is about visual structural learning and manipulation tasks of robot arm.

We suppose our team can increase the diversity of different research communities which focus on visual and learning based methods of manipulation tasks. The research and applications about robot arm manipulation are just getting started in China, and still have lots of troubles and problems to solve. First, the biggest robot arm company in China only sold a few thousands of products last year, but it is already a boosting of nearly 40% increase, which means though the market is not big enough, it is developing quickly. Many companies have planed to utilize robot arms to do repeatable works in recent years and it seems to be a promising growing market. Second, the cost of robot arm is a bit too expensive for Chinese college labs, leading the scarcity of Chinese labs in intelligence manipulation research. As far as we know, there are no more than 5 labs take the risk of buying a robot arm in our EECS department. We set up a simple one-robot-arm lab a few months ago and it approximate cost us half a year's fund. Thus, it is somehow risky for Chinese colleges to do such research and we need to constantly make achievement to put more into this area. Third, the traditional robot control and the leaning based control area haven't got enough attention and accumulation in China, so there are few Chinese research college teams in the advanced community of learning based manipulation and control. These areas are relatively more popular and active in Europe and US, we think it would be better to have more diversity members from other academic communities to work on with it.