AKGEC-KUKA
INDUSTRIAL ROBOTICS TRAINING CENTRE

Bin picking robotics using 3D object recognition

Factory automation is currently expected to improve productivity, quality and/or safety in the production industry, especially for functions depending on workers. At production sites, parts in bins are arranged and transferred by workers. Parts such as bolts are stored in bins, and it is easy for humans to handle several types of parts at a time. However, it is extremely difficult for robots to measure parts in bins with a sensor, recognize individual parts, and take them out.

This project will allow industrial robots to work in bin picking, payload handling, assembly, and similar operations. The project integrates advanced technologies; such as sensing and measurement technology, control technology, and mechanics technology, to automate operations not possible for conventional robots.