

Researchers 'teach' robot to assemble an IKEA chair



Robots in Singapore have completed a task many humans dread — assembling flat-packed IKEA furniture.

Sifting through pages of instructions and a jumble of screws and bolts to build the low-cost Swedish furniture might soon be a thing of the past given advances in technology, researchers at the city-state's Nanyang Technological University said.

The scientists spent three years programming the robot — made of arms, grippers, sensors and 3D cameras — which assembled the frame of an IKEA dining chair in about 20 minutes.

They say it might not be long before such robots can fully assemble a piece of furniture from a manual, verbal instruction or by just looking at an image of the finished item.

“We have achieved the low-level capability to teach the robot ‘how to do it’ and then in the next five to 10 years, high-level reasoning — the ‘what to do’ — could be done too,” assistant professor Quang-Cuong Pham said.

The team at NTU are looking to work with artificial intelligence experts to try and hone the process, Pham said.

“It’s interesting to see an example of how robots could potentially contribute to our vision of creating a better everyday life for many people,” said Cindy Andersen, global business area manager of kitchen and dining at IKEA, in an interview with Britain’s Daily Mail. “We are very positive about embracing new technology.”

Singapore has been pushing businesses to invest in automation and robotics to boost productivity as it keeps a tight leash on cheap foreign labor. Some restaurants and hotels even use robots to deliver food to customers, and collect used plates and cutlery.