

This robot can fix an IKEA chair in under 9 min



Reuters

Robots assemble an Ikea chair at Nanyang Technological University (NTU) in Singapore

Singapore: Sick of struggling with incomprehensible instructions and a baffling array of planks and screws? Help is at hand in the form of a new robot that can assemble an IKEA chair in minutes.

The robot, developed by scientists at Singapore's Nanyang Technological University, can put together the wooden IKEA chair in just eight minutes and 55 seconds — a swift timing that may give even DIY enthusiasts a run for their money.

The device, consisting of two mechanical arms with grippers, starts the process by taking photos of the parts spread on the floor with a 3D camera.

Each arm has a similar range of motions to that of a human, while sensors mounted on the wrists monitor how much force is being exerted by mechanical fingers as it picks up tiny parts to expertly put the chair together.

Team leader Pham Quang Cuong, an assistant professor at the university, said, "The job of assembly... has to be broken down into different steps, such as identifying where the chair parts are, the force required to grip the parts, and making sure the robotic arms move without colliding into each other."

The team is now looking into further developing the robot so it can learn to construct furniture by copying humans. AFP