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This Robot Can Build An Ikea Chair Without Any Human Help

'No assembly required'



By Thomas Tamblyn



Now we're not saying that [Ikea's](#) furniture is impossible to put together but we are definitely saying that it has become something of a rite of passage for everyone to have built an Ikea wardrobe at least once.

Thankfully those days could be behind us as a team of scientists from Nanyang Technological University, Singapore have created a robot that can assemble a piece of Ikea furniture completely on its own.

And we do mean on its own, there was no human intervention or helping the robot understand the instructions. Instead the pair of robotic arms were able to piece together the Ikea chair in around 8 minutes.

How? Well the robot used a 3D imaging camera which was able to let it see effectively as we do.

The robot then took around 3 seconds to locate and identify all the parts required and then 11 minutes to understand how to put the chair together.



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Rather modestly, Asst Prof Pham said, “For a robot, putting together an IKEA chair with such precision is more complex than it looks. The job of assembly, which may come naturally to humans, has to be broken down into different steps, such as identifying where the different chair parts are, the force required to grip the parts, and making sure the robotic arms move without colliding into each other.”

Rather worryingly however this robot is just one of a family of highly-dextrous robots that could soon be entering factories.

This latest invention differs quite considerably from MIT’s own efforts at furniture-building robots in that this one is putting together pre-made pieces.

MIT have alternatively [developed a robot that can actually build the parts](#) for the furniture but then requires human intervention to actually put the pieces together.