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Can You Assemble an IKEA Chair Faster Than This Robot?

Kenya Foy
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So far, technology has introduced the world to robots that dust, vacuum and lull you to sleep. Now there's been some major progress made in the form of a robot that assembles IKEA furniture, proving that the momentum of these multi-tasking machines and their automated functions is progressing faster than it takes to memorize the entire IKEA catalog.

While that incredible feat took one woman only a week to accomplish, researchers from Nanyang Technological University in Singapore got a robot to put together a Stefan chair from the home goods giant in about 20 minutes. While that speed doesn't quite measure up to that of a human, a paper published in Science Robotics notes that the robot successfully completed its assigned task "with no special provisions for robotic assembly."

To enable its autonomous capabilities, the robot's arms are equipped with 3D cameras that help it to keep track of and distinguish individual pieces as well as force sensors designed to ensure that the bot doesn't apply excessive pressure. However, researchers did provide their subject with a little bit of assistance during the assembly process, which they previously tested back in 2015. The team pre-programmed the robot with 3D images of the chair along with the assembly manual.

Researcher Dr. Francisco Suárez-Ruiz tells The Verge that he has great confidence that some of the major kinks can be remedied in the future, making way for robots to assume additional tasks that humans really don't want to do or jobs that put people in harm's way.

"In the future, we envision that robots like this should be helping with tedious or dangerous tasks," Suárez-Ruiz said. "There are so many industries where these skills would be useful, like logistics, or packing for e-commerce companies."

Now the only question that remains is whether these robots will make house calls.