Robots can now assemble an IKEA chair in 20 minutes—without fighting



Thank you, robots! (NTU Singapore)

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After <u>years of failed attempts</u>, a research team in Singapore has successfully taught a pair of robots to do something that many humans still can't: <u>build an IKEA chair</u>.

The wooden Stefan chair is not the world's first piece of AI-assembled flatpack furniture: Robots at MIT <u>built a simple Lack table</u> in 2013. A chair is more complicated. And while a robot can be programmed to do a

single assembly-line task efficiently, mastering all of the small tasks that IKEA assembly requires is a bigger challenge. Some of the same things humans struggle with, like fiddling with bags of screws, dowels, and doodads while trying to distinguish the slight variations in shape, are also difficult for robots.

Researchers at Singapore's Nanyang Technological University spent three years programming robots to accomplish the specific tasks necessary to build this particular chair. The next stage will be expanding the machines' intelligence to be able to assemble a chair just by looking at a photograph of the final product, Wired reported.

"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," researcher Quang-Cuong Pham told Reuters.

AI-assisted furniture assembly won't just save time and headaches: It could also save your marriage. The dynamics of flatpack furniture assembly contain a minefield of relationship conflict triggers, to the point where IKEA-related conflicts come up with surprising frequency in marriage counseling sessions.

"Couples tend to extrapolate from the small conflicts that arise while shopping for and building furniture that perhaps they aren't so made for one another after all," Maisie Chou Chaffin, a London-based clinical psychologist who works with couples, previously told Quartz. Perhaps the most remarkable thing about the Nanyang robots' successful assembling of a chair is that they did it without fighting.