

MIT scientists launch personalized robot project

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A view of the campus of the Massachusetts Institute of Technology. Scientists at the Massachusetts Institute of Technology launched a five-year, \$10 million project to bring the power of robots to the average person is just getting started.

Imagine going to a local store, picking out a design for a robot to help with some household chores, and having the device built within a matter of hours.

That is the vision of scientists at the Massachusetts Institute of Technology, where a five-year, \$10 million [project](#) to bring the power of robots to the average person is just getting started.

"This research envisions a whole new way of thinking about the design and manufacturing of robots, and could have a profound impact on society," said MIT professor Daniela Rus, leader of the project.

The first two designs under consideration for [prototypes](#) include an insect-like machine that could be sent to explore a contaminated area, and an arm-extension device that could help people grip things that are out of reach.

The idea is eventually to create a library of home robotic designs that customers could choose from at a local store, select a blueprint and customize and build their own device from paper or plastic within 24 hours.

"This project aims to dramatically reduce the development time for a variety of useful robots, opening the doors to potential applications in manufacturing, education, personalized healthcare, and even [disaster relief](#)," said Rob Wood, an associate professor at Harvard University.

The funding for the project comes from the National Science Foundation and is for a team that includes researchers at MIT, the University of Pennsylvania and Harvard University.

Another key goal is to eliminate the soaring costs involved with the current manufacture of robots, a lengthy process that involves advanced programming and design knowledge as well as high-tech materials, and instead foster automated production of devices made from common papers and plastics.

That way, what used to take years might someday take only hours.

"It's really exciting to think about the kind of impact this work could have on the general population -- beyond just a few select people who work in robotics," said associate professor Wojciech Matusik, a principal investigator at MIT's Computer Science and Artificial Intelligence Laboratory.

More information: ppm.csail.mit.edu/

[Press release](#)

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