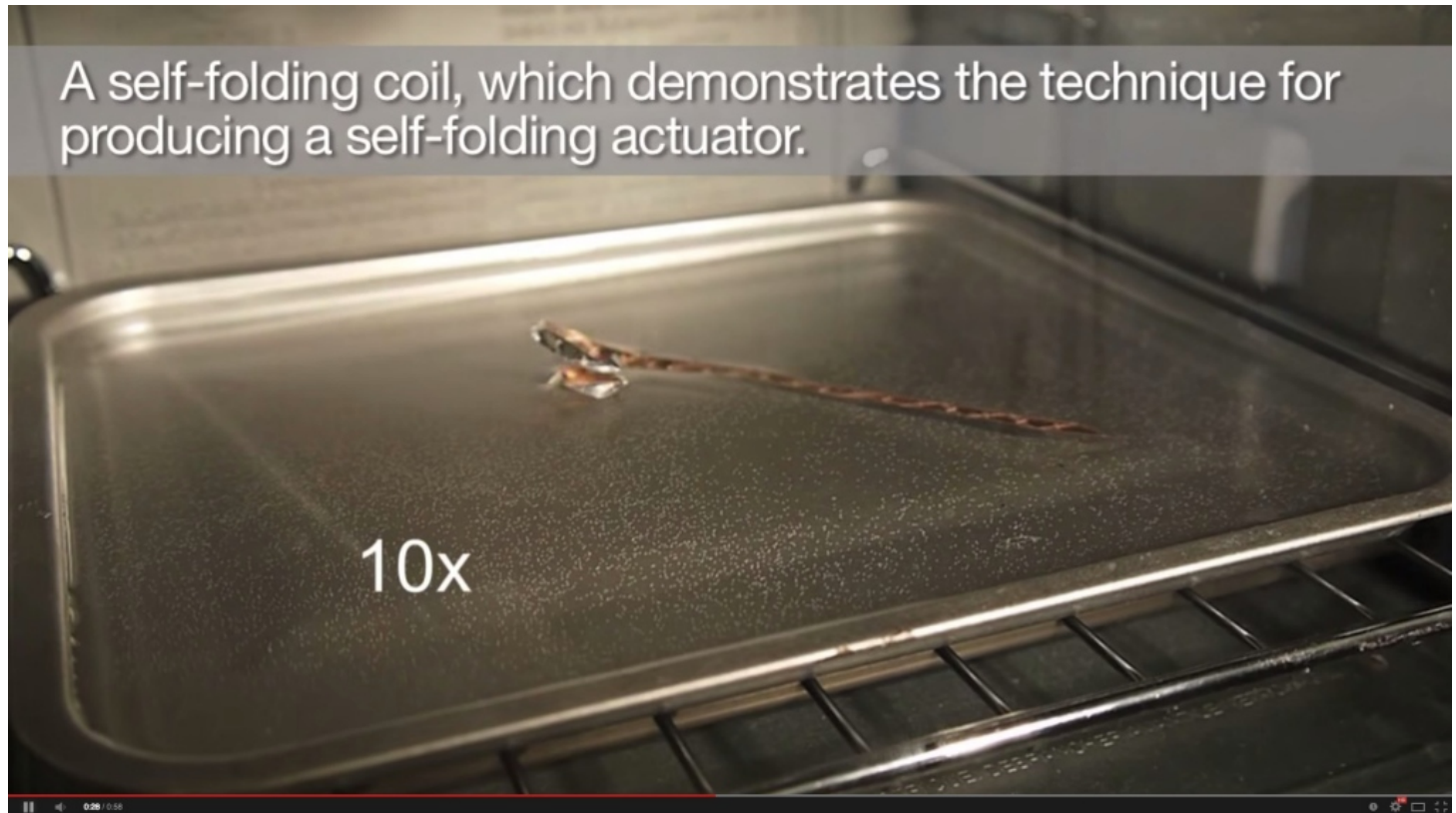


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MIT designs 'bake-your-own' robots

Relaxnews

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A self-folding coil, which demonstrates the technique for producing a self-folding actuator.

A 'bake your own robot' demonstration is pictured in this video screenshot. (YouTube)

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(Relaxnews) - A robot made of printable components that self-assemble when "baked" has been developed by researchers at the Massachusetts Institute of Technology (MIT).

The 'bake-your-own robot' concept involves heating up 2D plastic printed parts that unfold into three-dimensional components when exposed to high temperatures.

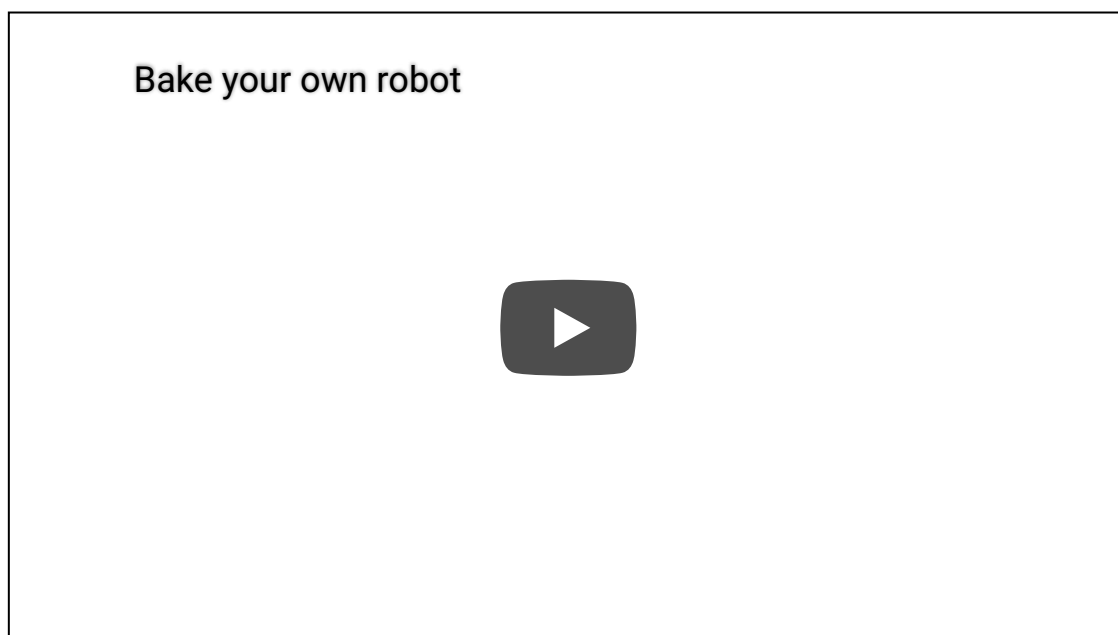
The work of MIT Professor of Electrical Engineering and Computer Science Daniela Rus, the baked robots work on the principles of origami to unfold.

The mechanical parts include a self-folding strain sensor, which varies electric current passing through it when compressed, and a self-folding actuator.

As the parts fold and contract during the heating process, they pull the components together to create a finished robot, working as electromechanical muscles.

The concept was unveiled at the IEEE International Conference on Robotics and Automation in Hong Kong earlier this month.

"We have this big dream of the hardware compiler, where you can specify, 'I want a robot that will play with my cat,' or 'I want a robot that will clean the floor,' and from this high-level specification, you actually generate a working device," explains Rus.



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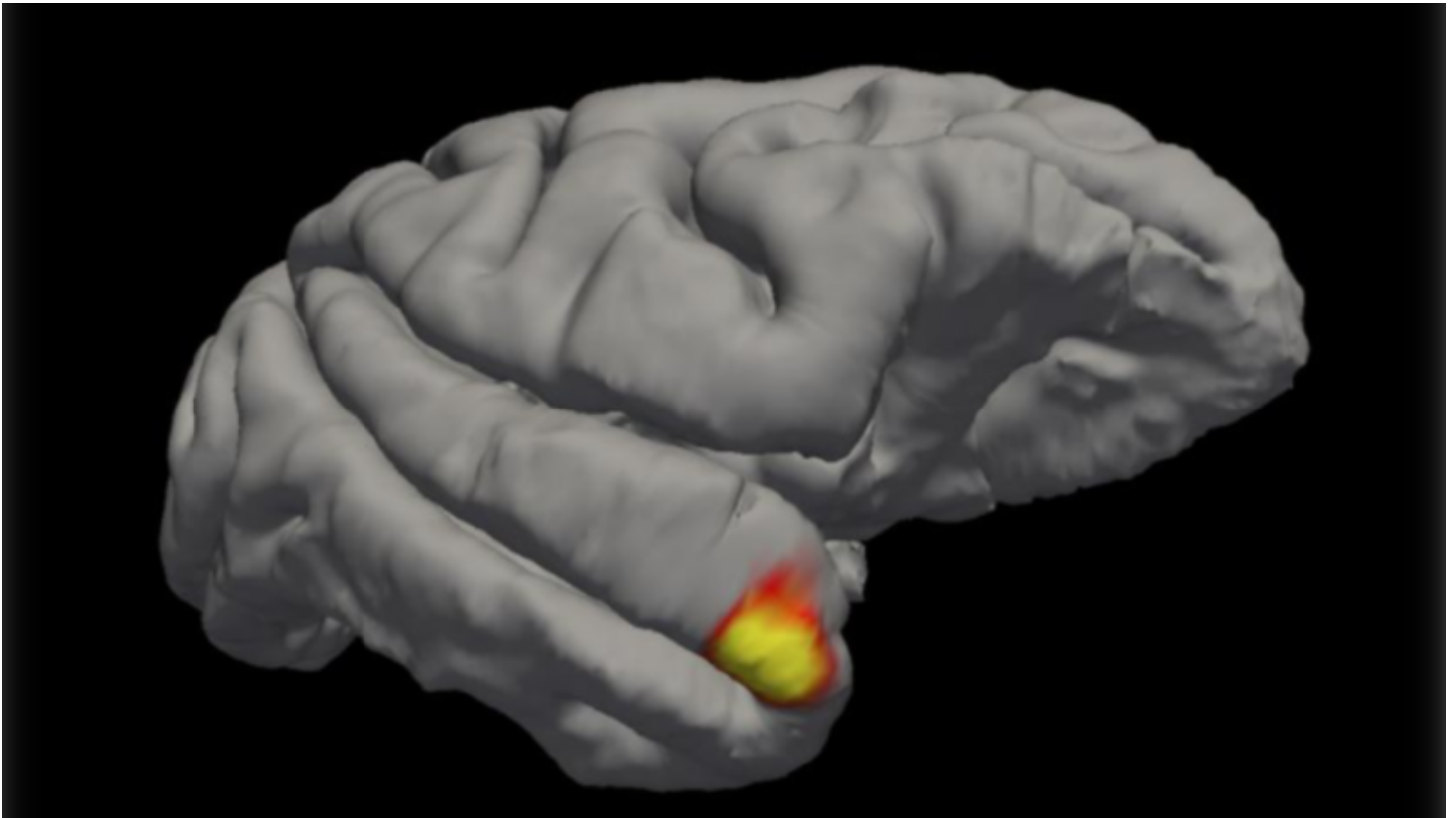
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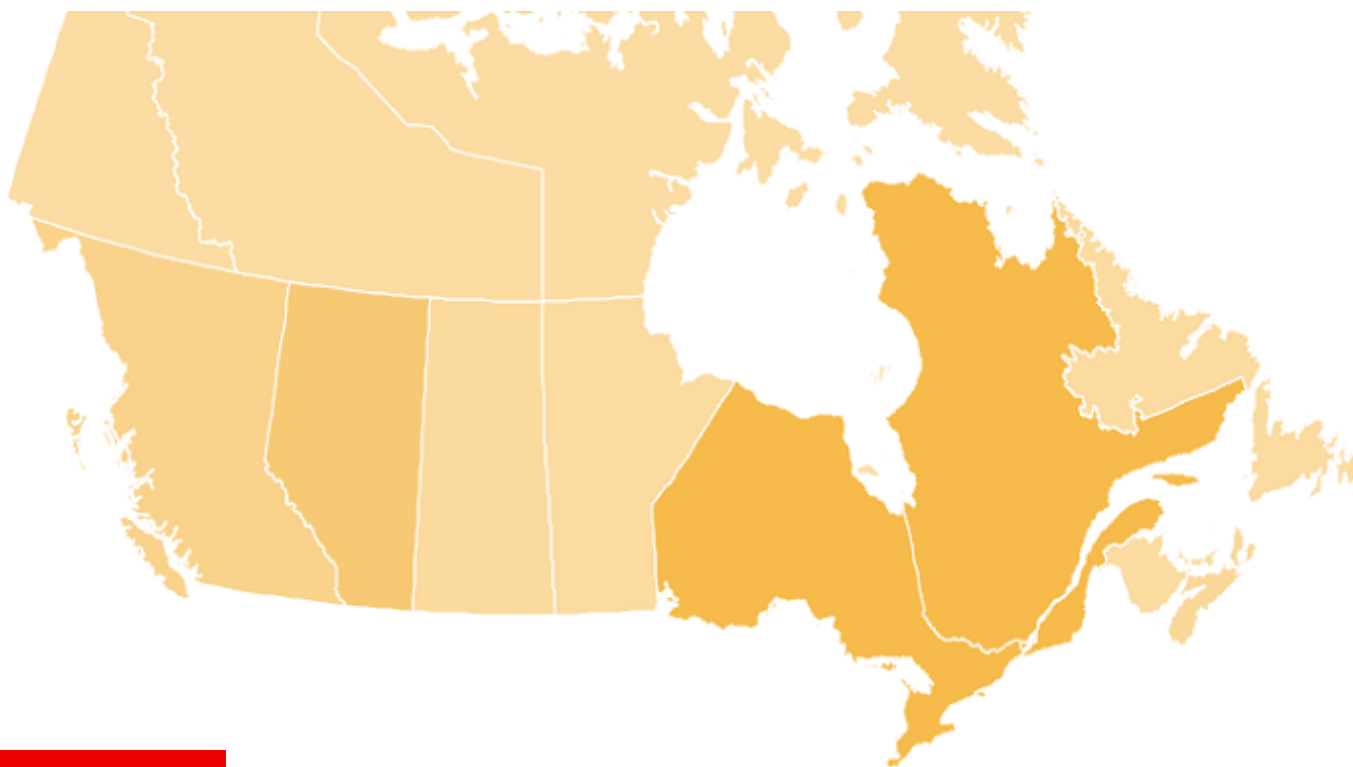


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