

The E-ROBOT Prize:

Soft Mechanical Metamaterial Robots for Opaque Envelope Retrofits

Team POC:
Jesse Silverberg, PhD
js@multiscalesystems.com
+1-855-955-7900



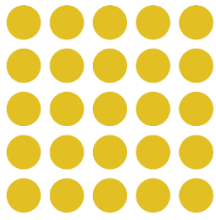
We make mechanical metamaterials

Instead of creating materials through chemical or molecular engineering, we design geometric patterns that enhance conventional materials with new functionality.



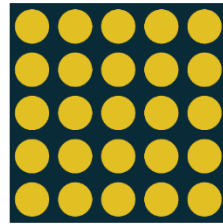
Conventional material

+



Geometric pattern

=

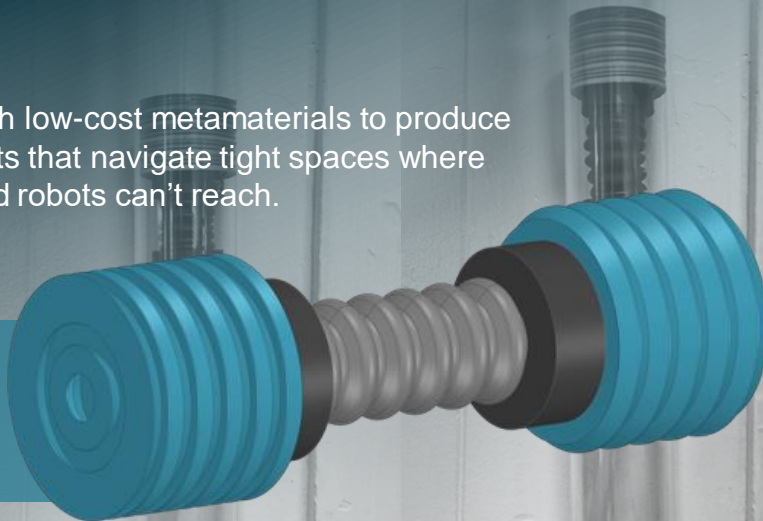


Metamaterial

Our Solution

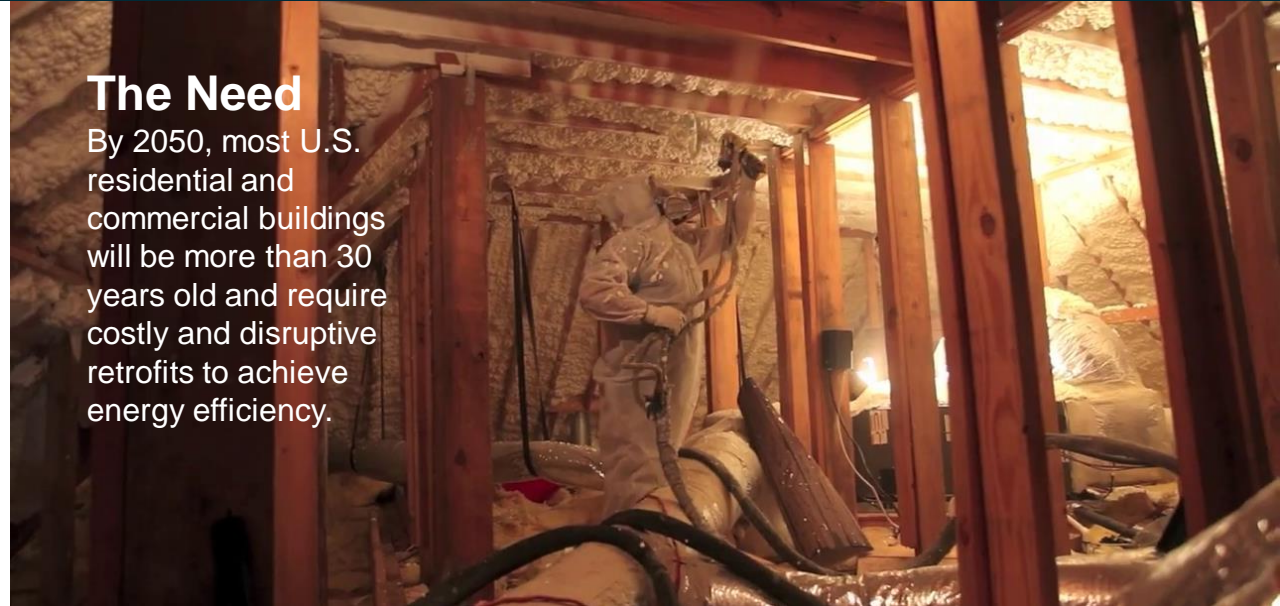
Replace costly machines with low-cost metamaterials to produce soft shelled, low-profile robots that navigate tight spaces where humans and servo-controlled robots can't reach.

Watch our submission video for more on our solution:
https://youtu.be/3_fiq4DAqao



The Need

By 2050, most U.S. residential and commercial buildings will be more than 30 years old and require costly and disruptive retrofits to achieve energy efficiency.



Why Us?

We are a partnership representing industry, academia, accelerators, and commercialization partners - all with a track record of success.

