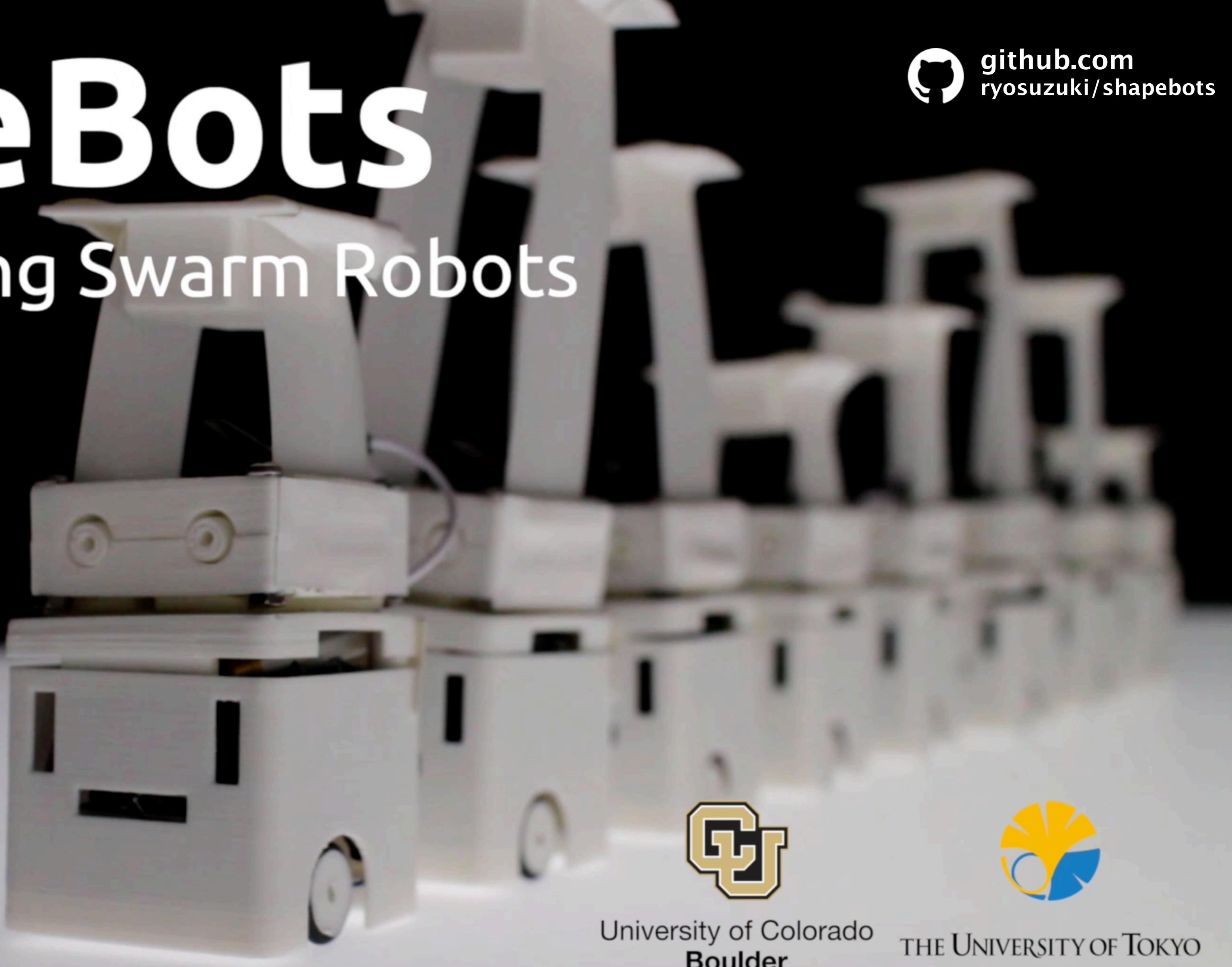


ShapeBots

Shape-changing Swarm Robots

Ryo Suzuki
 Clement Zheng
 Yasuaki Kakehi
 Tom Yeh
 Ellen Yi-Luen Do
 Mark Gross
 Daniel Leithinger



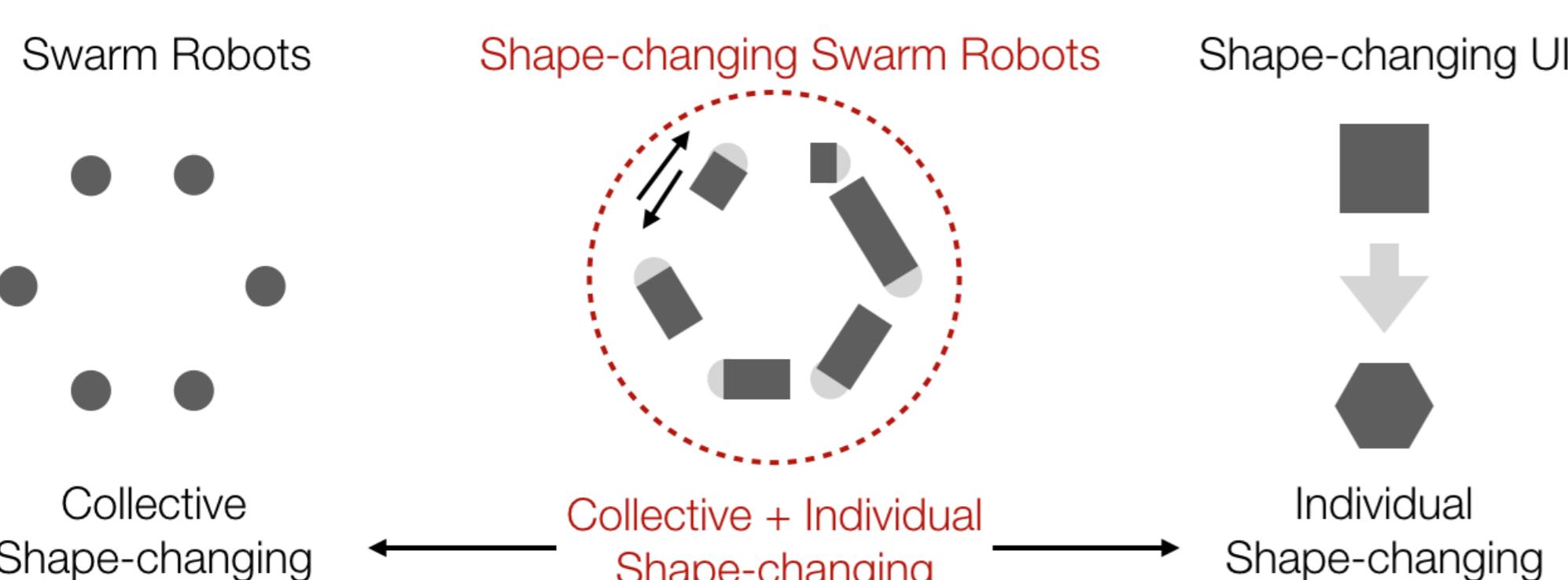
University of Colorado
Boulder



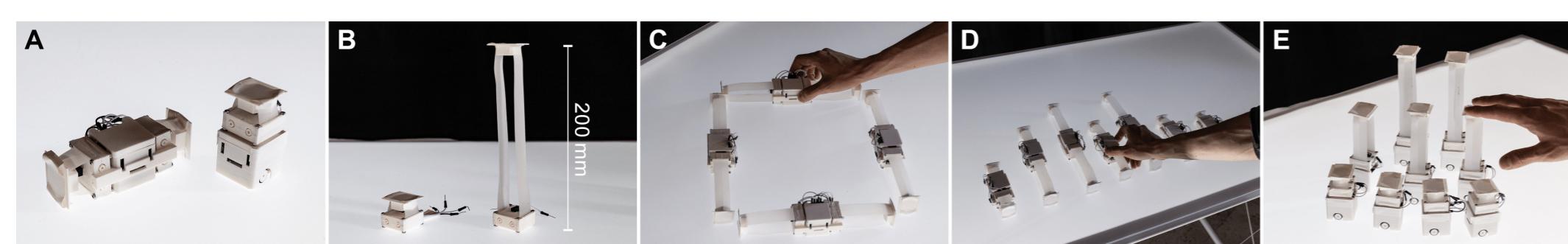
THE UNIVERSITY OF TOKYO

Shape-changing Swarm Robots

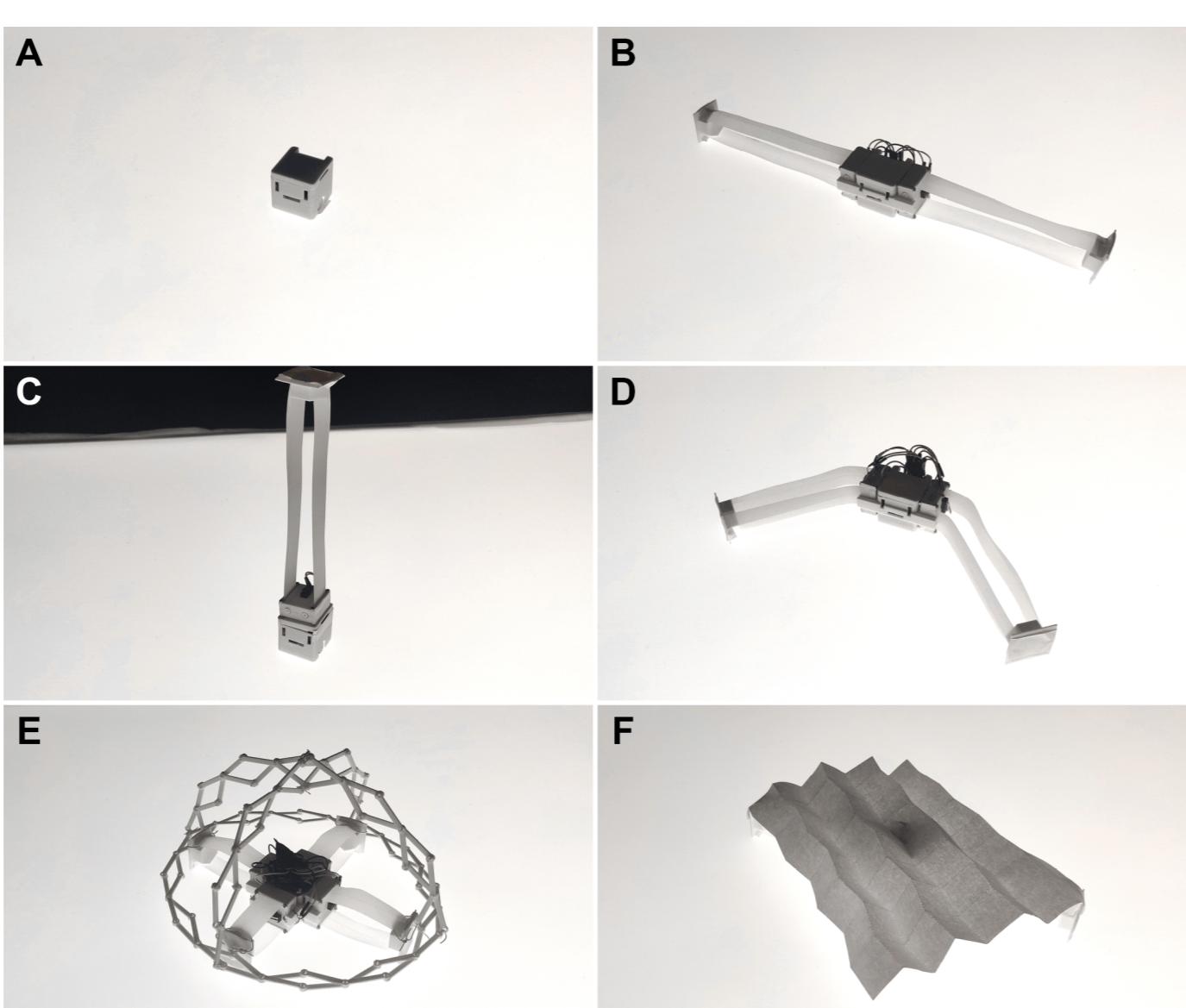
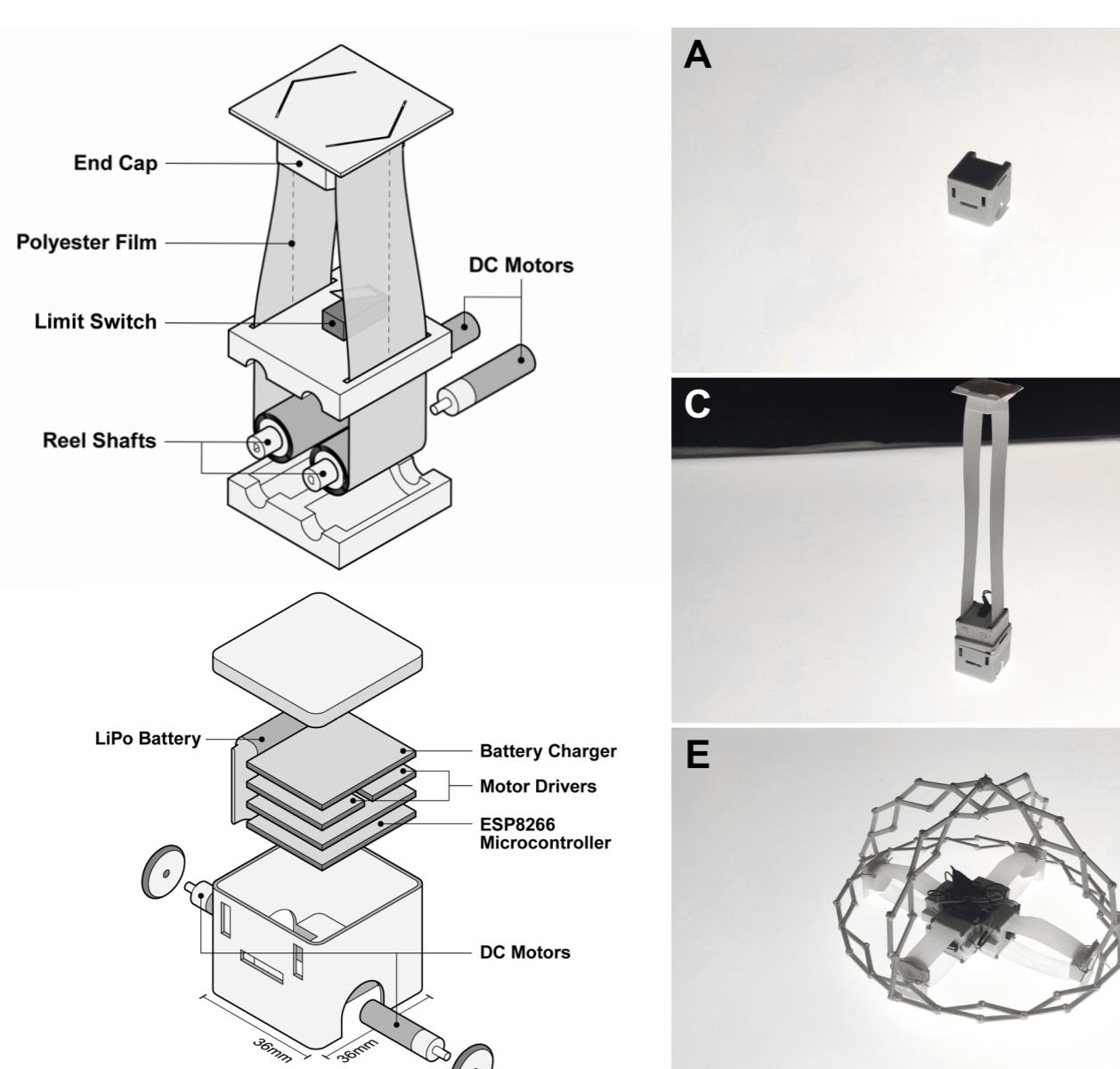
This paper introduce **shape-changing swarm robots**, a swarm of self-transformable robots that can both **individually** and **collectively** change their shapes.



ShapeBots

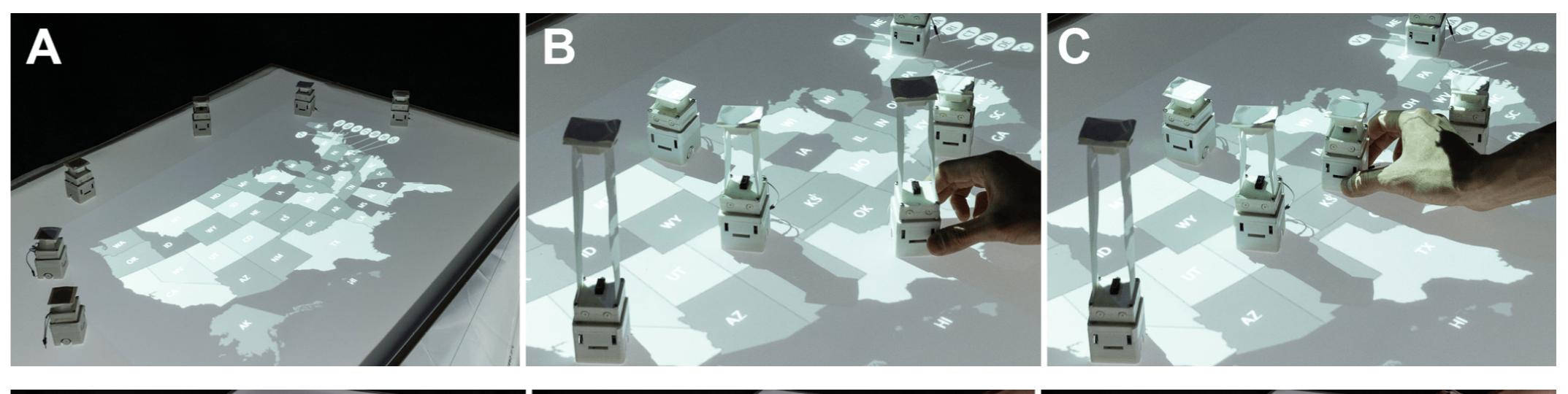


ShapeBots is a prototype system of shape-changing swarm robots, by leveraging highly extendable miniature reel linear actuator (extend from 2cm to 20cm, 3cm x 3 cm size).

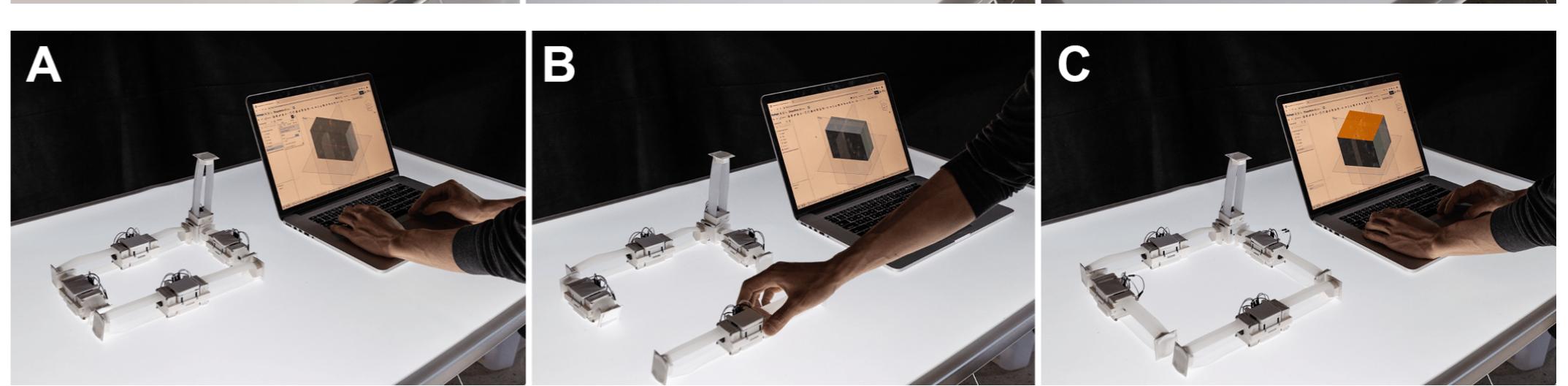


Applications Scenarios

Dynamic Data Physicalization



Interactive Tangible Display



Ambient Assistant

