Micro Robotics Lab

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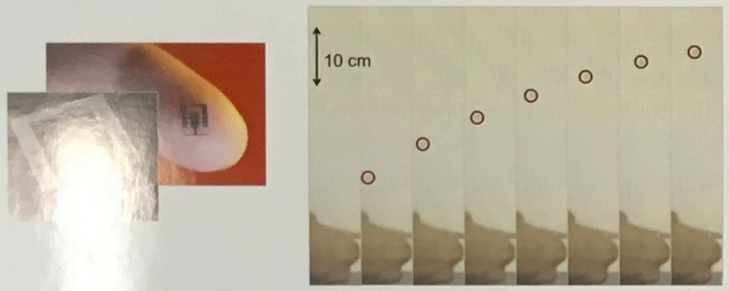
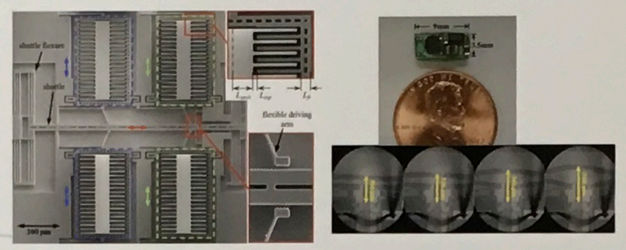
A. JAMES CLARK SCHOOL OF ENGINEERING

Goal: Expand the materials toolbox in microfabrication for improved locomotion and efficiency in small robots

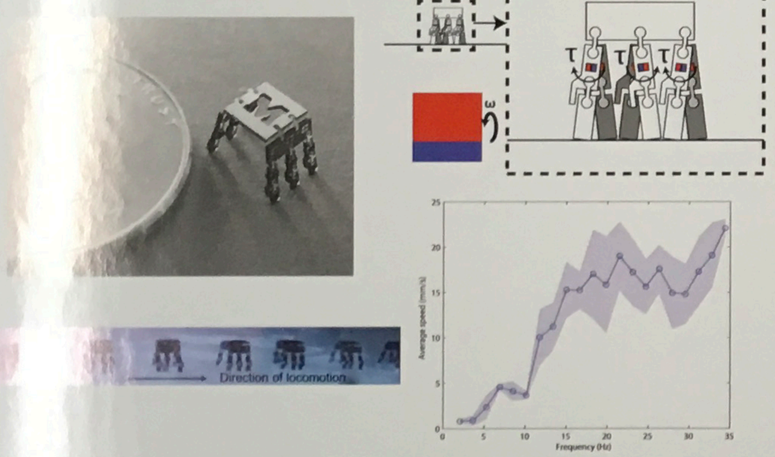
Incorporating elastomeric materials for energy storage for jumping robots



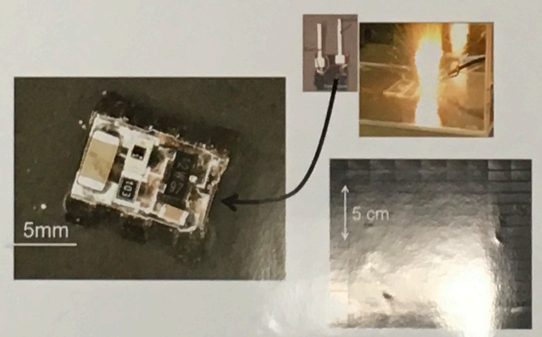
High force density, efficient microactuation systems (w/ Alireza Khaligh)



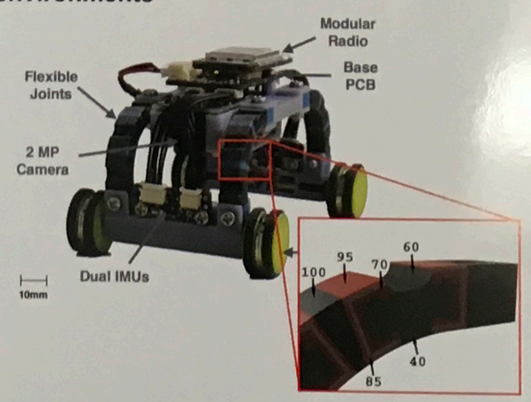
mer joints with magnetic actuation for g/running robots



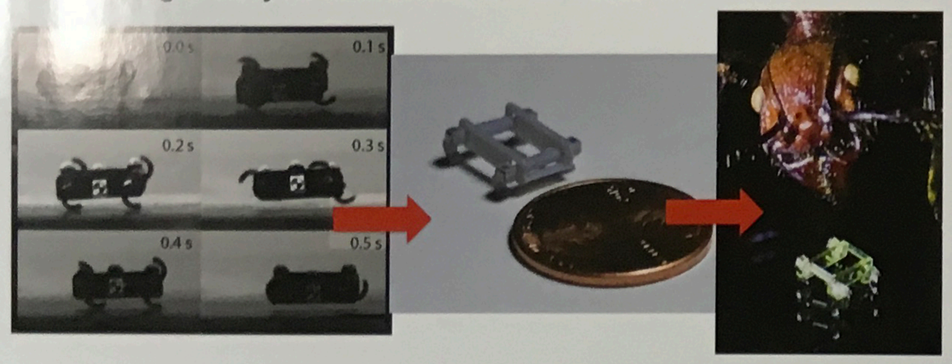
Energetic actuation for jumping robots (w/ ARL)



Compliant legs for locomotion in complex environments

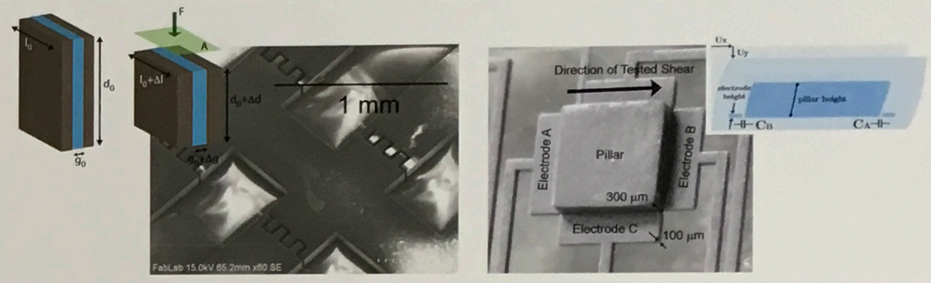


ding to study locomotion down to ant scales

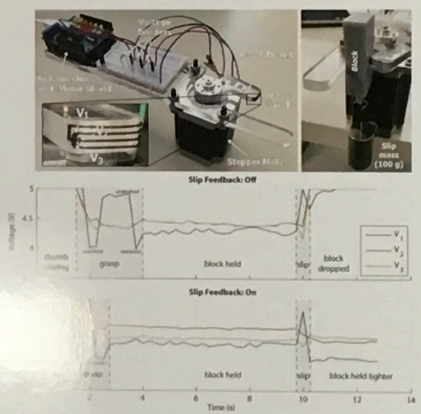


Goal: Microfabrication with multiple materials for improved sensors and actuators in larger robots

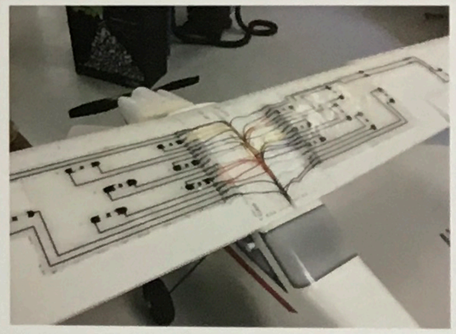
Elastomer-based capacitive force/strain sensing systems



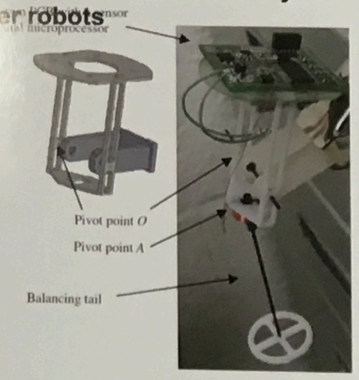
3-axis tactile sensing for robot manipulation



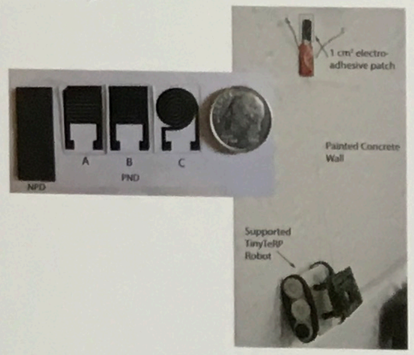
Strain sensing skins for improved UAV performance in gusty conditions



Inertial appendages (tails) for stability and maneuverability on ... robots



Electroadhesives to control robot adhesion to surfaces for climbing



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