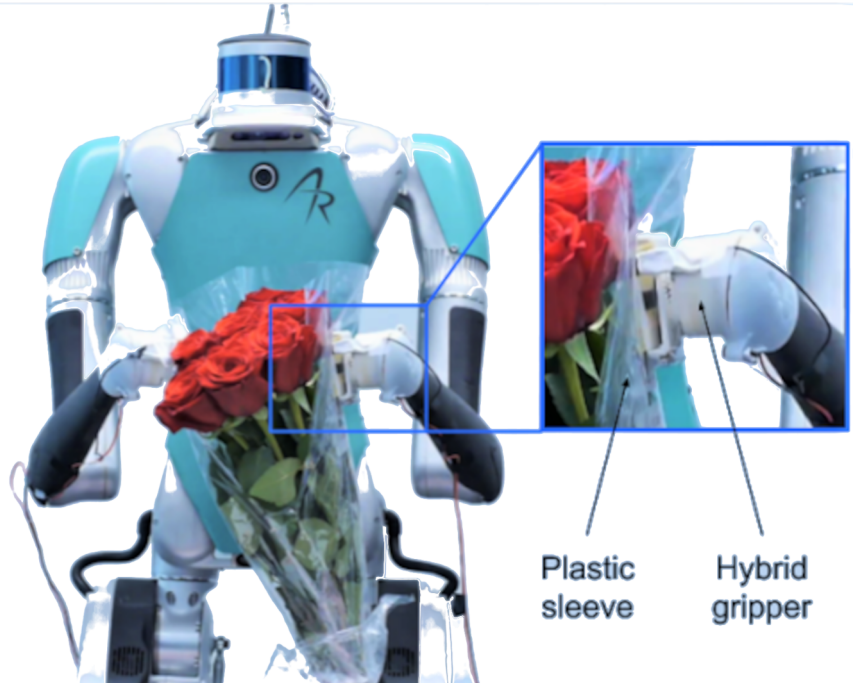


Beyond the Gecko

Design and Fabrication of Hybrid Adhesives for Robotics

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What started as a collaboration among biologists and engineers to understand the adhesive system of the gecko has taken on a life of its own. The latest developments include grasping objects in space and augmenting Van der Waals forces with electrostatics. The new hybrid adhesives work on a wide range of materials and conditions while maintaining the controllable grip that made gecko-inspired adhesion desirable for climbing robots like StickyBot. In this talk we will cover new fabrication processes for creating flexible hybrid adhesives, with example applications that include robotic gripping of soft, deformable materials and flexible clutch mechanisms for robotic or wearable devices. Following the presentation, we will hear from some students who have been following a short course on Microfabrication for Bioinspired Adhesive Surfaces as they present their final proposals.

1 Mar 2022
h.15.00

Aula Pacinotti &
Microsoft Teams

