LEMUR

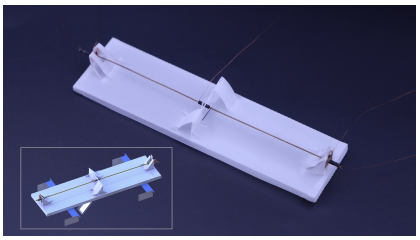
Laboratory for
Embedded Machines &
Ubiquitous Robots
https://uclalemur.com

1538 Boelter Hall

OPEN HOUSE

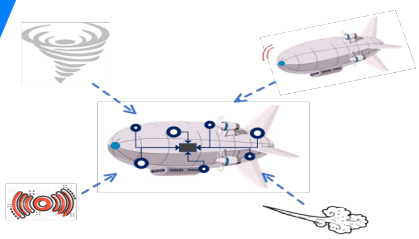
May 13, 2022, 2-4pm(PDT)

Demos and Presentations

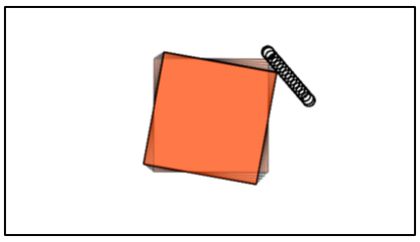


Printable Mechanical Autonomy
Building printable autonomous robots in an inexpensive and rapid prototyping manner by embedding sensing, control, and actuation into materials.

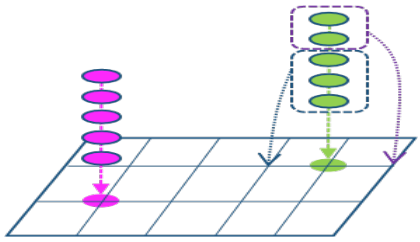
Autonomous Agile Airship Armada
Design a fleet of blimps that can compete in an aerial soccer game and study the relative design questions.



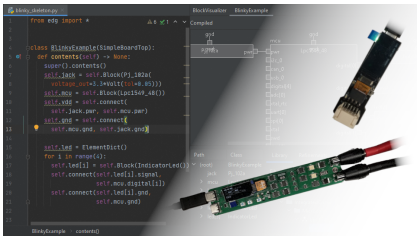
Sensor Planning Framework
Joint state and input estimation of agent based on recursive Kalman filter given prior knowledge. Unify continuous and discrete cases and solved by Expectation–maximization algorithm.



Predicting Tactile Pushing Using Illustrative Models
Build models of pushed objects that account for changing frictional contact using a mixture of real and simulated data.



Decentralized Multi-agent Reinforcement Learning System
A fully decentralized algorithm based on mean-field theory, in which agents can deal with heterogeneous task and only depend on neighbours' information.



Electronics Design Language
More expressive, automated, and powerful board-level circuit design using programming techniques in a mixed textual / graphical interface.

Simulation and Controller Generation for Foldable Robots
Computational design (+controller generation) and evaluation of foldable robots, in simulated environments.

Our lab is in **1538 Boelter Hall**
Come visit, there will be food!

Enter the building using
the indicated doorway
on the first floor