



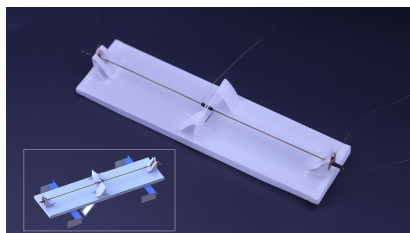
Laboratory for  
Embedded Machines &  
Ubiquitous Robots  
<https://uclalemur.com>

1538 Boelter Hall

# OPEN HOUSE

Fri, Apr 14, 2023, 2-4pm

Demos and Presentations



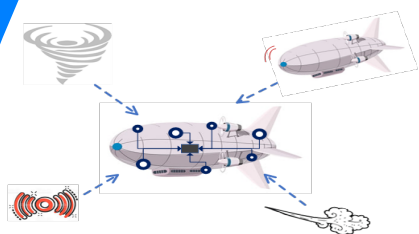
## Printable Mechanical Autonomy

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



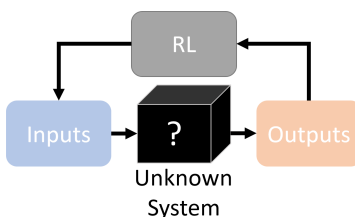
## Remote Control Blimps

These were built for an autonomous aerial soccer game, but have been reprogrammed to be remote control for a fun and interactive demo. It's also got pretty flashing lights.



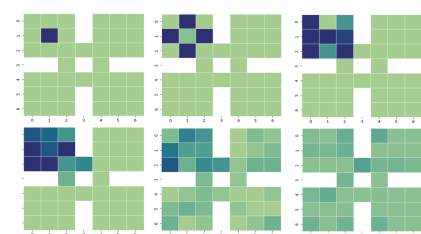
## Sensor Planning Framework

Building framework for decentralized state estimation that optimally allocates different collaborative agents based on their limited measurement capabilities and uncertainties, leading to improved overall estimation performance.



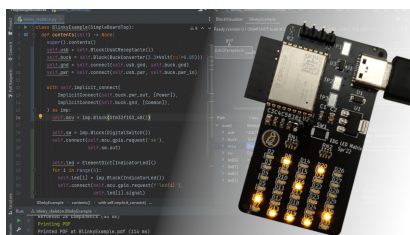
## Reinforcement Learning for Unknown Systems

Designing and using reinforcement learning to optimize an agent or robotic system. Specifically applied within motion planning and robotic system controls.



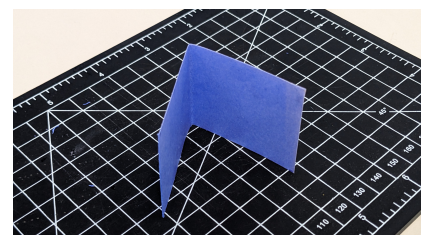
## Scalable Decentralized Multi-agent System

Let large-scale multi-agents learn to achieve a Nash equilibrium in an evolvable environment from any initial distribution in a decentralized way.



## Electronics Design Language

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



## Capturing plastic behaviour of origami folds

Simulating non-linearities of paper folding, to tailor mechanical properties of origami

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

Enter the building using  
the indicated doorway  
on the first floor

