REQUIREMENTS

- working on DIY Electric Dove Super Capacitor Wing Flapping Bird Toy
- add a pendulum to the bird toy to test and verify the stable dynamics in hover flight.
- Budget: $600

Bird toy

INNOVATION

- Tested out new idea
- canceling thrust by producing two thrust forces facing each other
- causing only lift
- Add up thrust force for better results

Add two birds to

Add forces

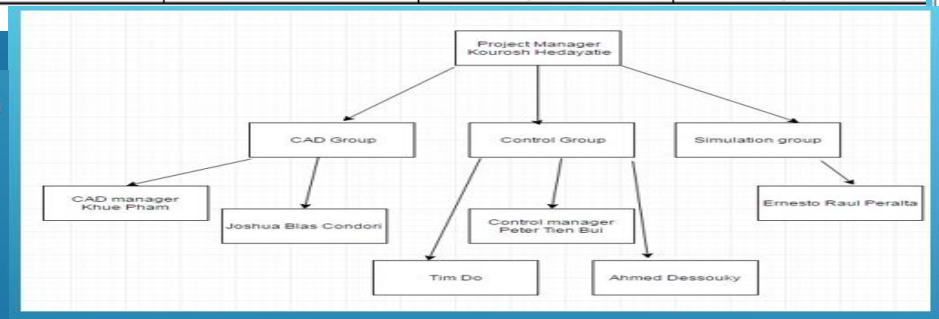
Cancel forces

FLAPPING MICRO AIR VEHICLE

OBJECTIVE

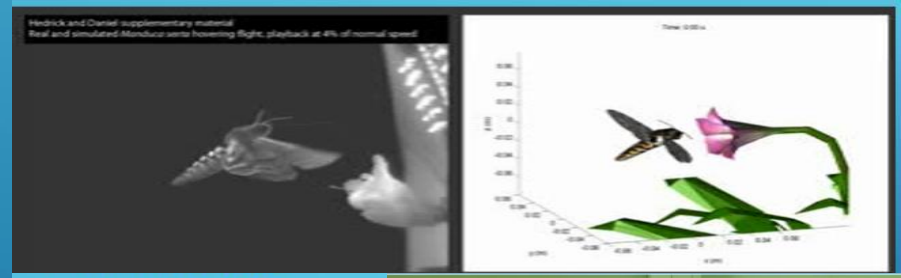
- proving and verifying the dynamics that create vibrational stabilization force during the insect's hovering.

	Fall quarter	Winter quarter	Spring quarter
Verify	the stability dynamics that can be seen during insect's hovering		
Quantify	the vibrational stable dynamics		
Design		a new mechanism base on dynamics	a new mechanism base on dynamics



BACKGROUND

Insects can hover while they have their stability. The idea is that there is a natural force similar to spring force that cause this stability.



ANALYZE

- analyzed the voltage to angle ratio
- Measured voltage with respect to angle
- Graphed angle verses voltage