

# ME 586: **Biology-** **inspired robotics**

Lecture 2

Prof. Sawyer B. Fuller

Goals:

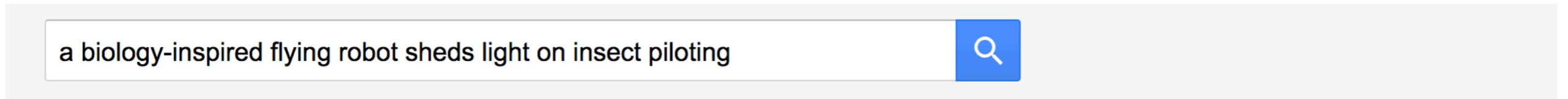
- announcements
- advice for how to do background research
- introduce paper 2
- paper 1 presentation

# Announcement

- There will be a short (~30 min) in-class quiz to test your understanding of basic concepts in the papers in this course
- Date: TBA, but will happen ~3/4 of the way through the course, well before course project is due
- worth 15% of your grade (will shuffle weights accordingly)
- main idea is to get you to revisit/review the material

# advice for how to do background research

- google scholar ([scholar.google.com](https://scholar.google.com))



My pr

[HTML] [A bio-inspired flying robot sheds light on insect piloting abilities](#)

N Franceschini, F Ruffier, J Serres - *Current Biology*, 2007 - Elsevier

When insects are flying forward, the image of the ground sweeps backward across their ventral viewfield and forms an "optic flow," which depends on both the groundspeed and the groundheight. To explain how these animals manage to avoid the ground by using this visual motion cue, we suggest that insect navigation hinges on a visual-feedback loop we have called the optic-flow regulator, which controls the vertical lift. To test this idea, we ...

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more recent work

also possibly relevant

link to online paper  
(usually available if you are on UW campus)

if not, try <https://sci-hub.tw/>

- also a good bet are google and youtube.

# Paper 2 preview

- Francheschini2007 “A biology-inspired flying robot sheds light on insect piloting abilities”

