Group Presentation Video

MECS 4510

EVOLUTIONARY COMP & DESIGN AUTO.

5m/s 2d/c   OctopusBot🐙
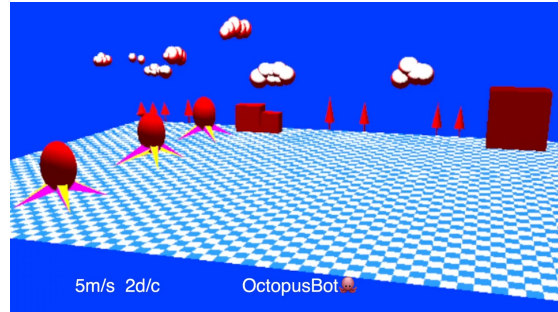
Name: Feiyu Yao & Wenjie Lin
UNI: fy2263 & wl2789
Instructor: Hod Lipson
Grace hours used: 0
Grace hours gained: 0
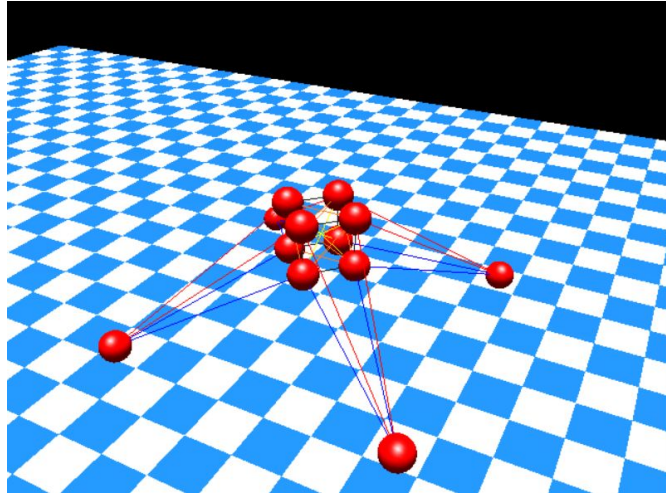Grace hours remaining: 365
Date: 12/07/2021

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Video of Best OctopusBot

5m/s 2d/c   OctopusBot🐙
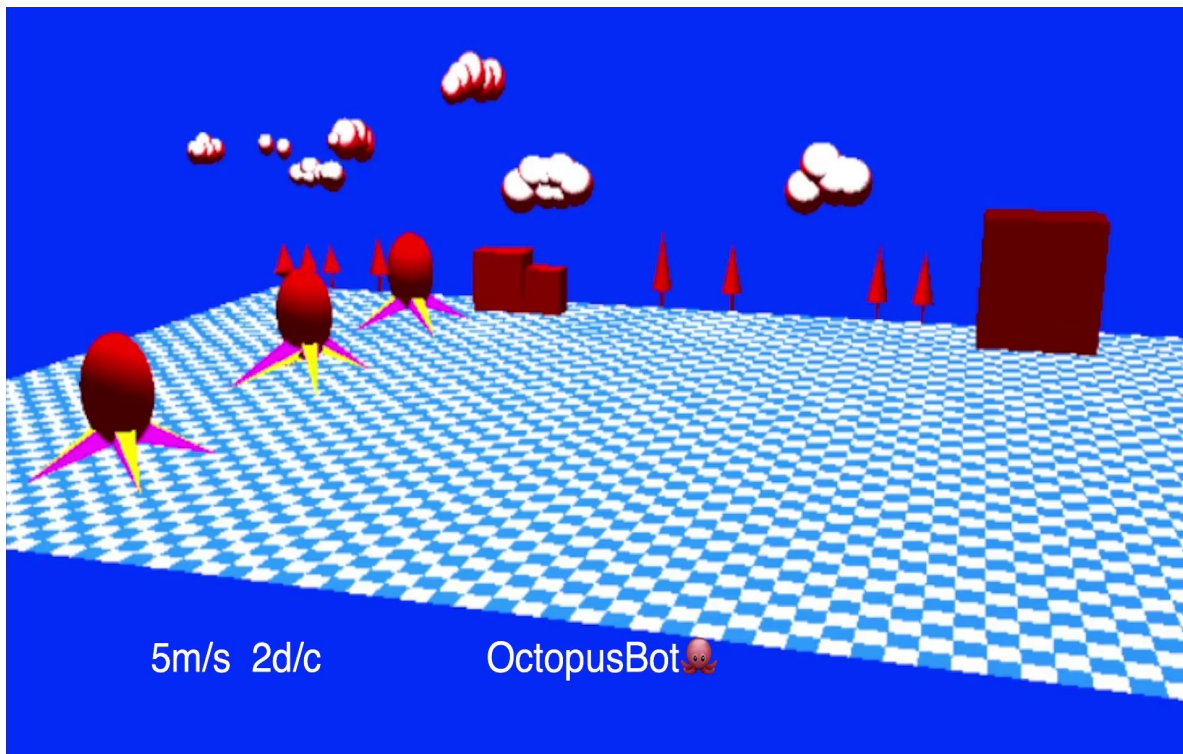
Representation Diagram

Same origin length springs share the same k, a, b.

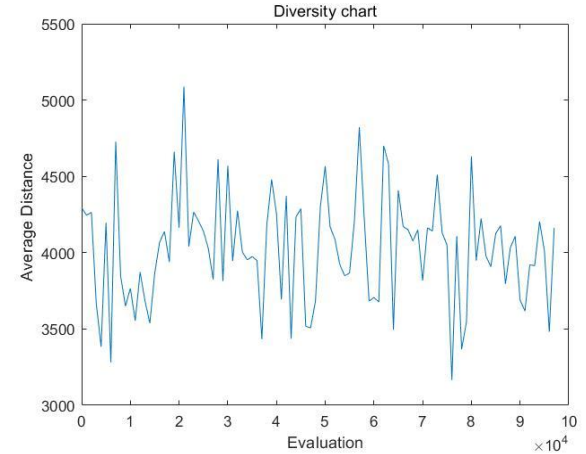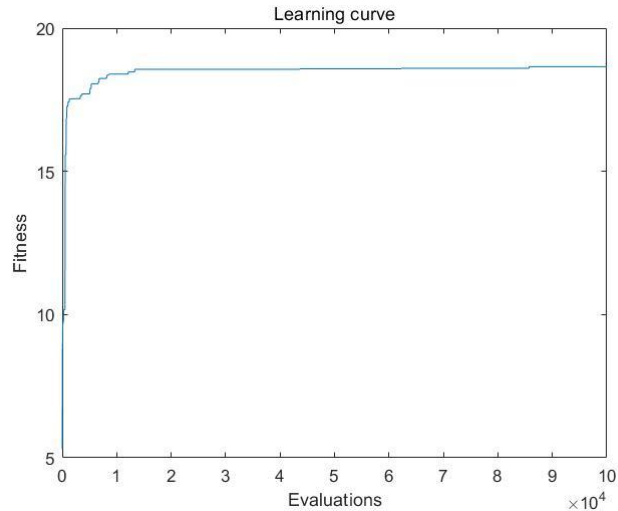Five different origin lengths
Side of the cube:
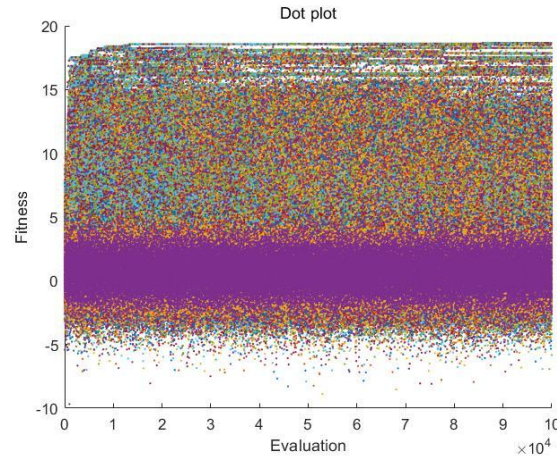The face diagonal of a cube
The body diagonal of a cube
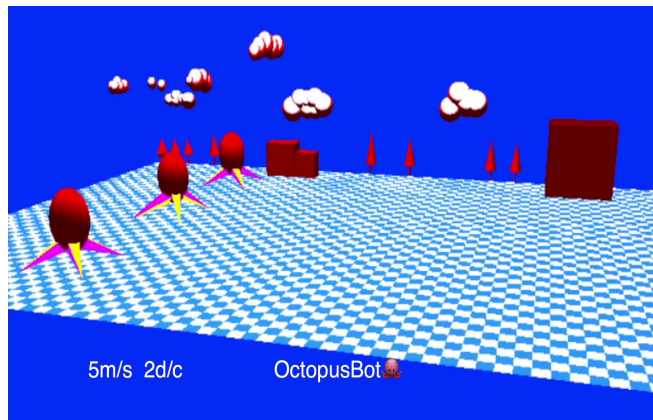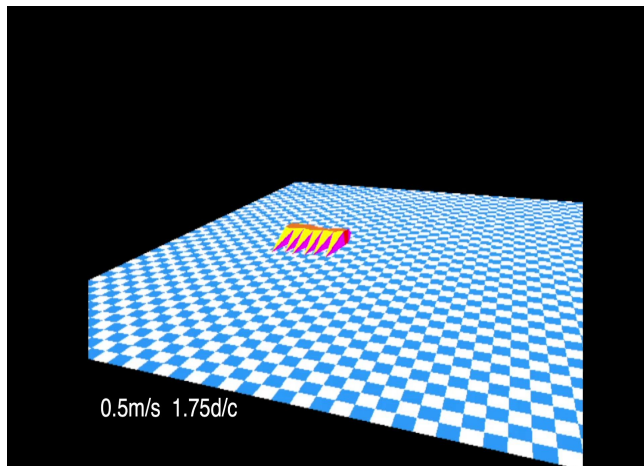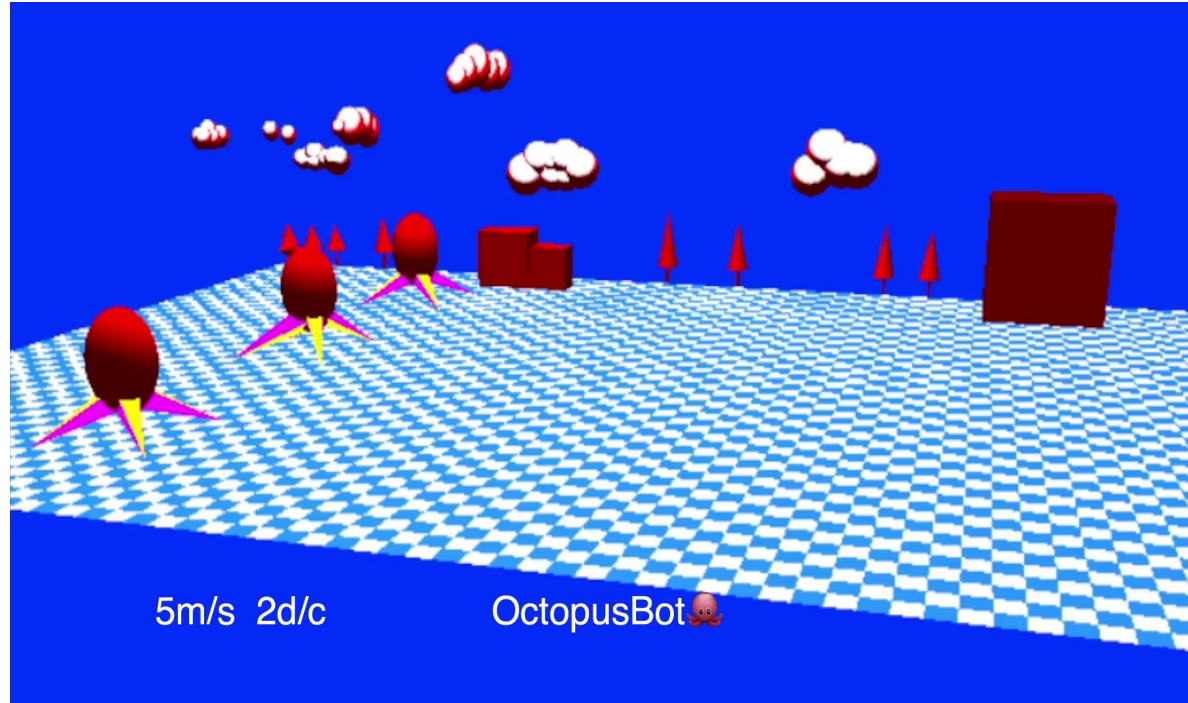The upper part of the leg
The lower part of the leg

Curves

Learning curve

Diversity chart

Age pareto is used to ensure diversity

Dot plot

Multi Robot Videos

0.5m/s 1.75d/c

2.5m/s 1.3d/c

5m/s 2d/c   OctopusBot🐙

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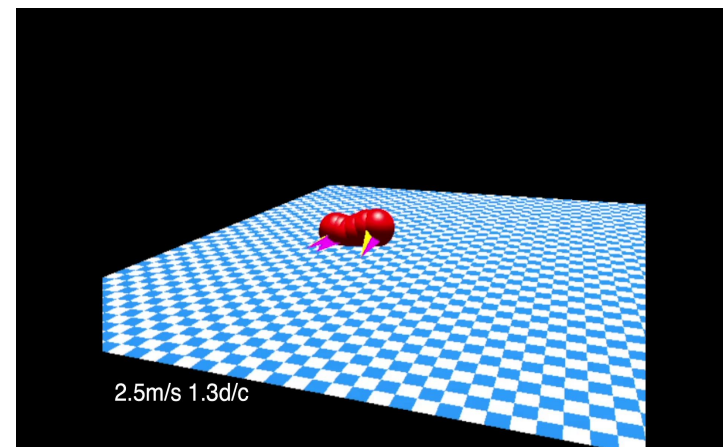
Single Video with Multi Robots

Robot Zoo
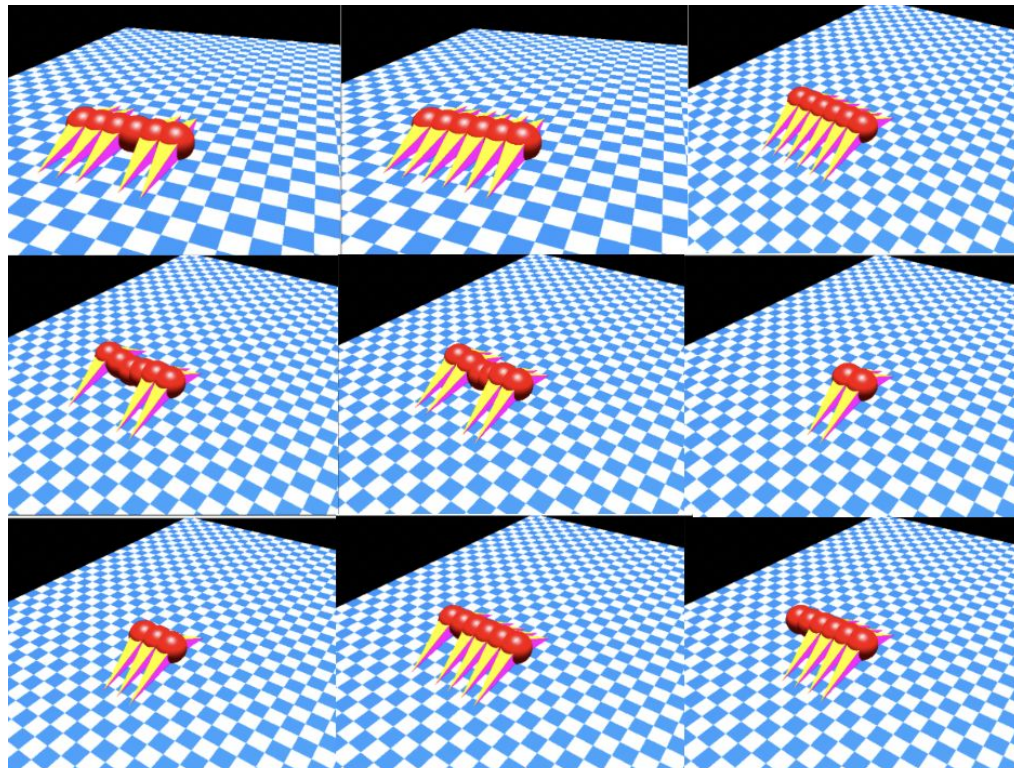
Nice Rendering

Trees

Shaded Face

Clouds

Buildings

Bars and Spheres

Ground Grid

5m/s 2d/c   OctopusBot🐙
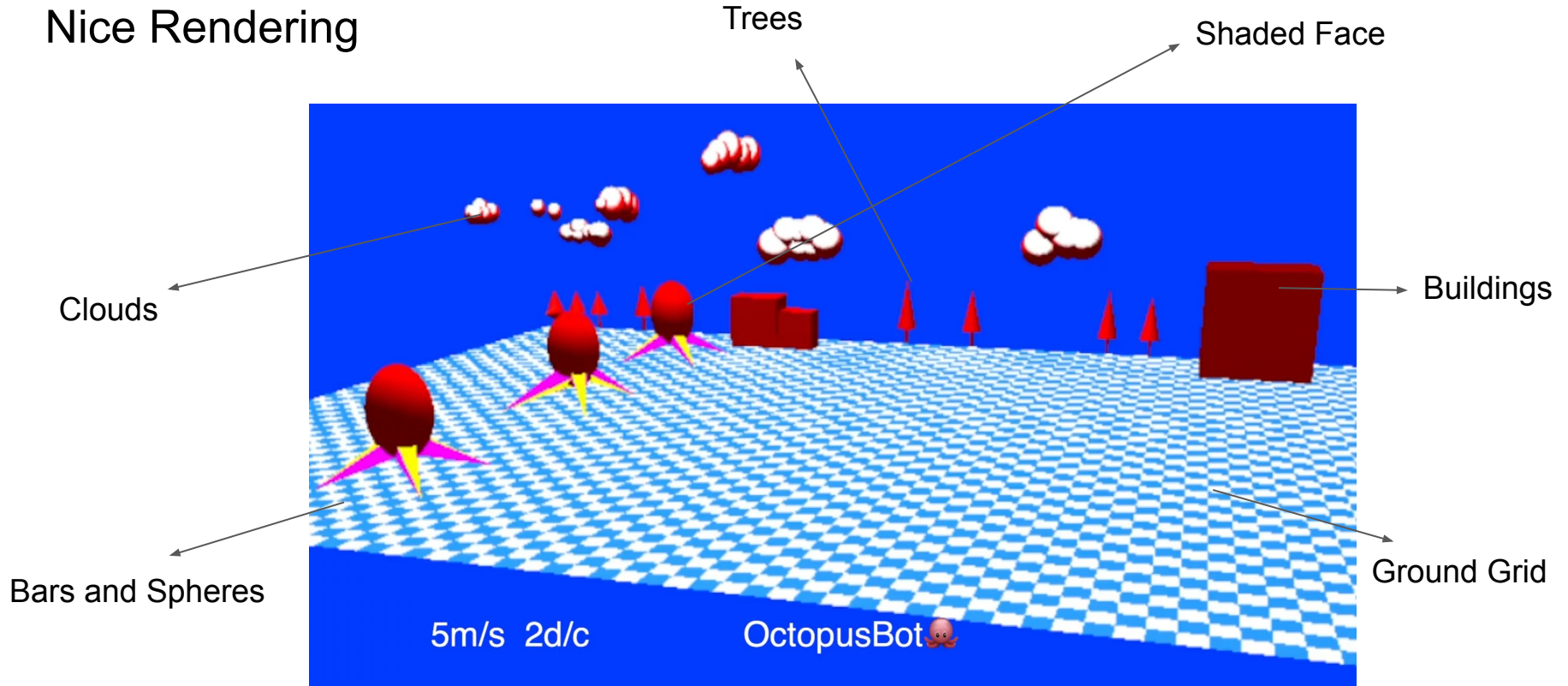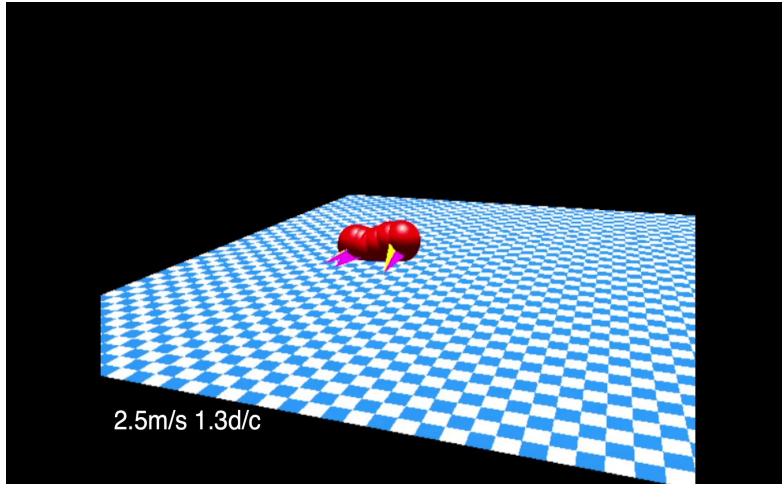
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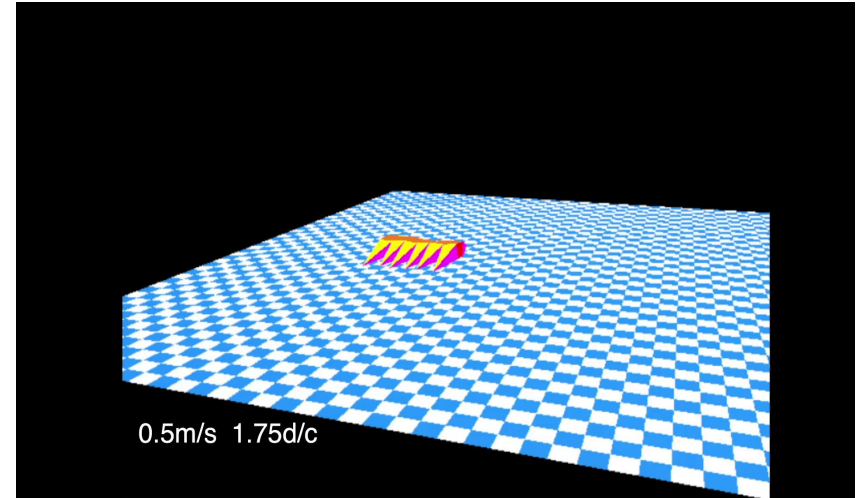The Fu Foundation School of Engineering and Applied Science
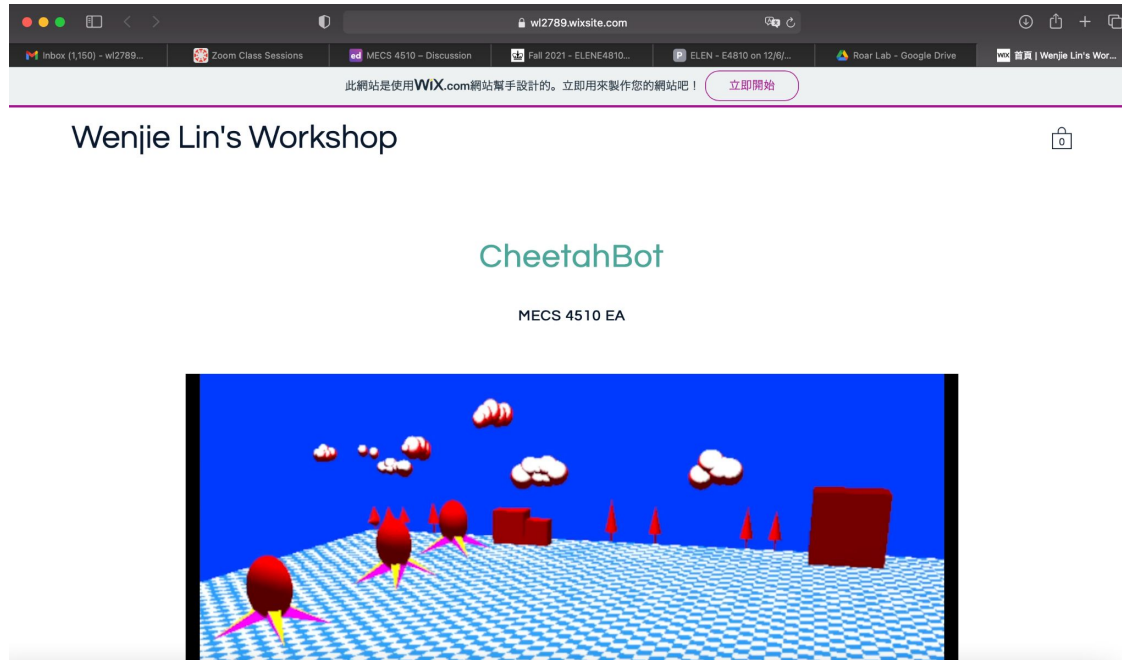
Comparison with Different Fitness Criterion

2.5m/s 1.3d/c

Fitness is the length traveled by the robot.
If the robot jumps, the fitness of the robot will be reduced.

0.5m/s 1.75d/c

Fitness is the length traveled by the robot.
If the robot jumps or rolls, the fitness of the robot will be reduced.

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Post Video on Portfolio

Thank you for your time!