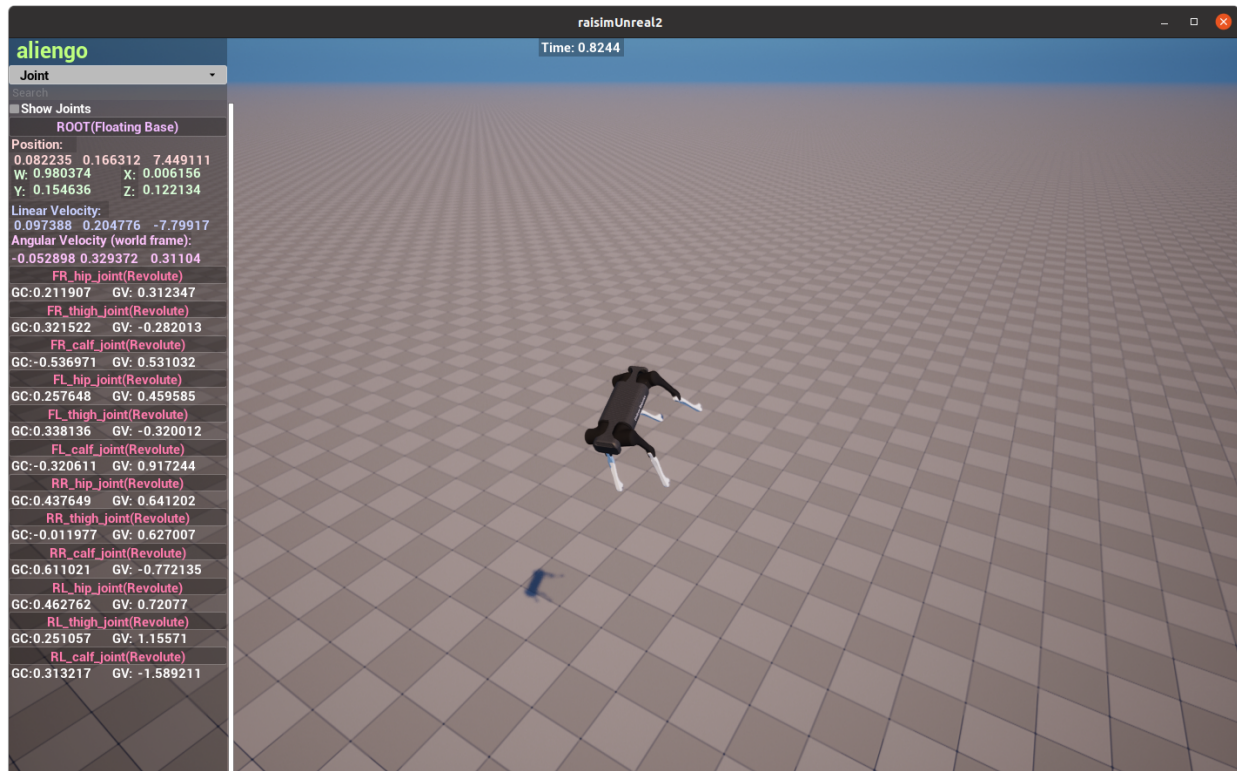


KAIST ME553 Robot Dynamics

Instructor: Jemin Hwangbo, Mechanical Engineering

Exercise 2

You will be using the Aliengo model for this exercise. You should download or clone the exercise repo here: https://github.com/jhwangbo/ME553_2023. When you run raisimUnreal2.exe and exercise_2.exe, you should see this screen. Make sure that “autoconnect” is checked on raisimUnreal because the whole simulation process is just 2 seconds.



Your goal is to write a function that computes the linear and angular velocity of the “FR_foot_fixed” given any joint angles and joint velocities. All velocities should be expressed in the world frame. You can find the description of the robot in “resource/aliengo/aliengo.urdf”. You can find about the URDF convention here: <http://wiki.ros.org/urdf/XML>

Deliverable: A single header file named “exercise_2_STUDENTID.hpp”. Use the provided template. You should replace “STUDENTID” with your real student id number. Submit it on KLMS.

Deadline: by the end of 11th of April, 2023