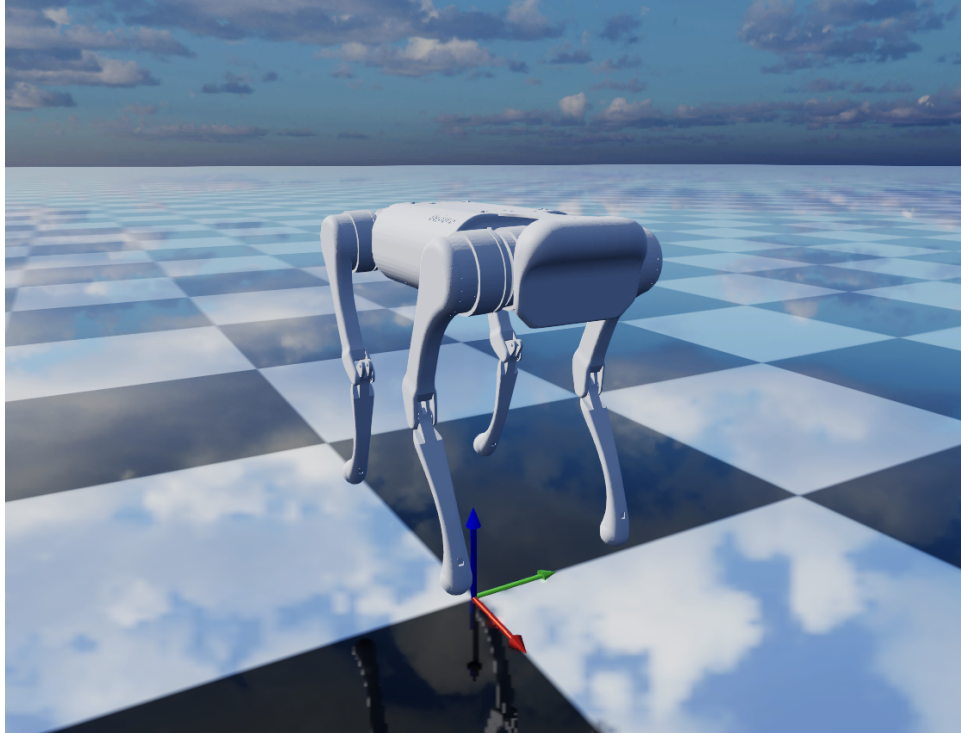


KAIST ME553 Robot Dynamics

Instructor: Jemin Hwangbo, Mechanical Engineering

Exercise 1

You will be using the A1 model for this exercise. You should download or clone the exercise repo here: https://github.com/jhwangbo/ME553_2022. When you run RaiSimUnity.exe and exercise_1.exe, you should see this screen.



On the right side, you see the robot description panel. Use the dropdown and navigate to the “Frames” panel. You can check which frame you want to show in this panel. You should find “RL_foot_fixed” in the list. Check it to display it on the screen.

Your goal is to write a function that computes the position of the “RL_foot_fixed”. You can find the description of the robot in “resource/a1/urdf/a1.urdf”. You can find about the URDF convention here: <http://wiki.ros.org/urdf/XML>

Deliverable: A single header file named “exercise_1_STUDENTID.hpp”. Use the provided template. You should replace “STUDENTID” with your real student id number. Submit it on KLMS.

Deadline: 5pm, 24th of March