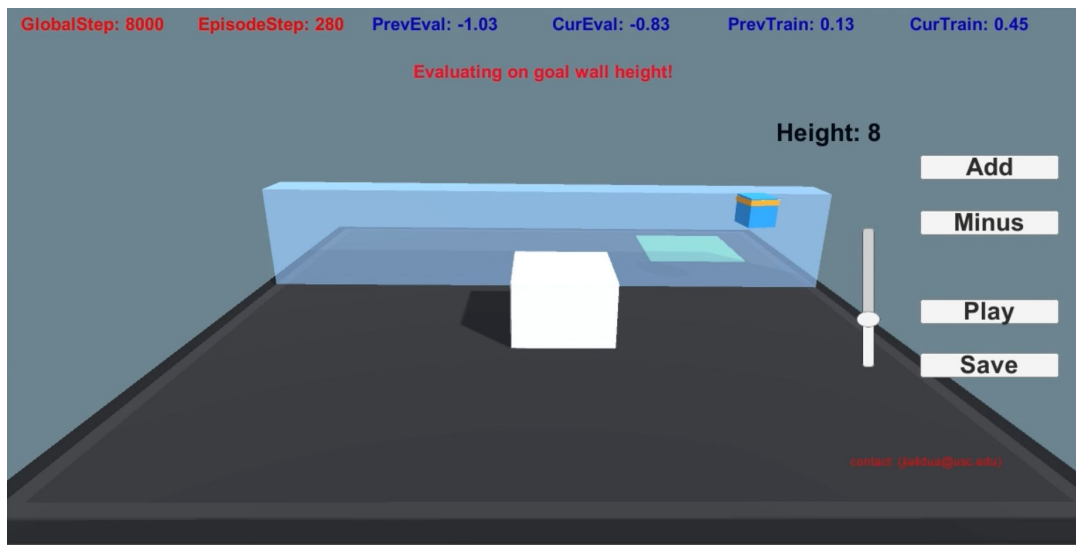


Interactive-Curriculum Reinforcement Learning

Project site: shorturl.at/iyMU2

Developer: Jiali Duan (jialidua@usc.edu)

You will work with **Wall-Jumper**, in our Interactive Curriculum Learning Environment, to help it learn to land on the green mat behind the wall by jumping over the wall. Imagine teaching a baby to jump, you may first start off by teaching it with a low wall before targeting the ultimate wall, thus a “curriculum”. The ultimate wall height is 8, as shown below.



Wall-Jumper task

Wall-Jumper task:

You will help the Jumper to learn how to jump over the wall height of 8 and land onto the green mat, by designing a curriculum of increasing difficulty. The difficulty is controlled by the height of the wall in the environment. You can slide the wall height bar up or down to increase or decrease the wall height ;

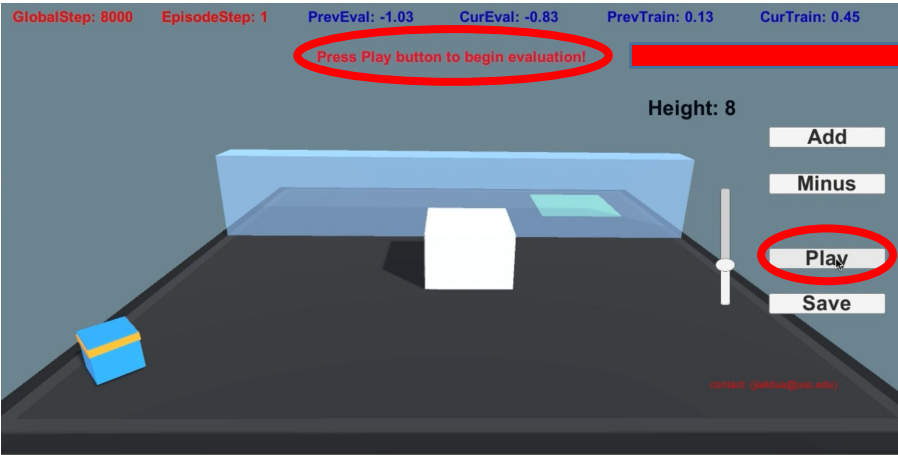
Installation: Not required

Launch: Type in the following command under the root of the directory in a terminal.

- MAC OS: `./learn`

Interact: The total time is around 3 hours, but you will only need to interact when the window is maximized. It will be minimized during training (you can drink coffee or watch a movie).

1. **Watch:** When the window is maximized, you'll see the instruction for what to do next. Press **"Play"** button to watch the performance of current agent trying to jump over the ultimate wall (height of 8).



Textual Instruction

Press **"Play"** to watch how current agent performs on the ultimate wall.

1. **Watch:** what's more, you may also want to look at some quantitative numbers. This is because the wall height you designed could have an impact on how jumper performs on the ultimate wall height.

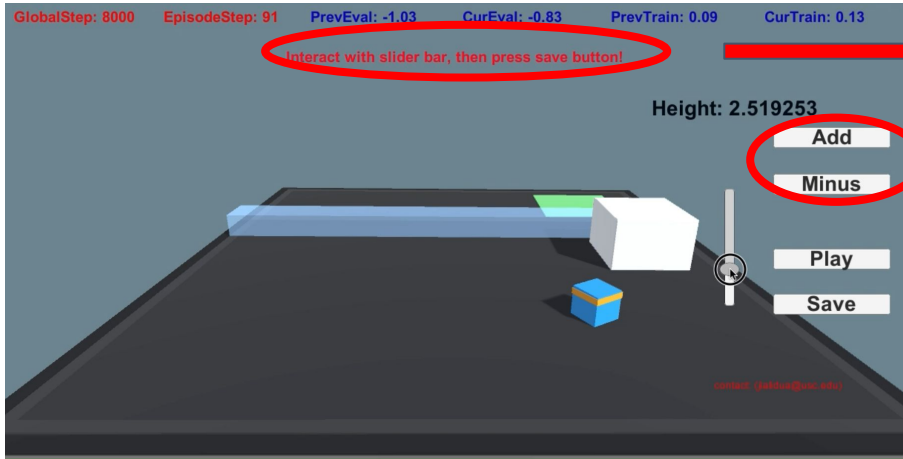


PrevEval and **CurEval** show the performance of previous Jumper and current jumper on the ultimate wall height !



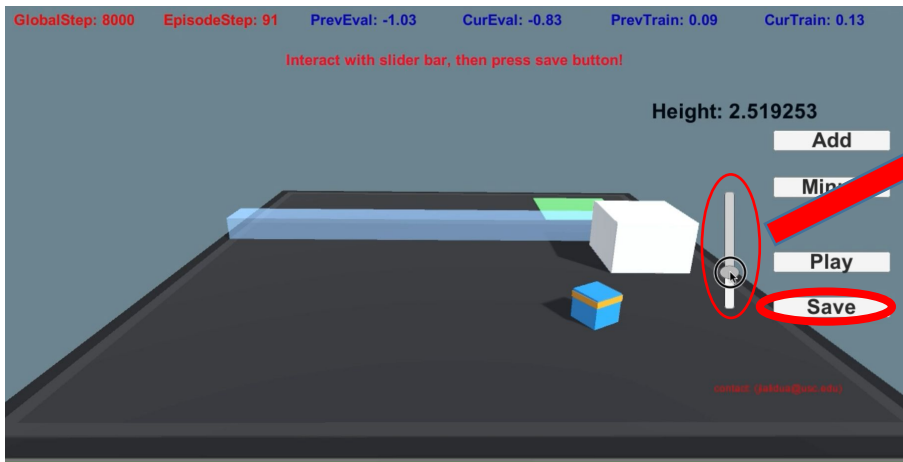
PrevTrain and **CurTrain** show the performance of previous Jumper and current jumper on the current wall height you designed!

2. Interact: After the evaluation session ends, the system will wait for your input, **slide the wall height bar** to change the difficulty, once the decision is made **click on "Save"** to record the new height and move to the training session



Ready to interact!

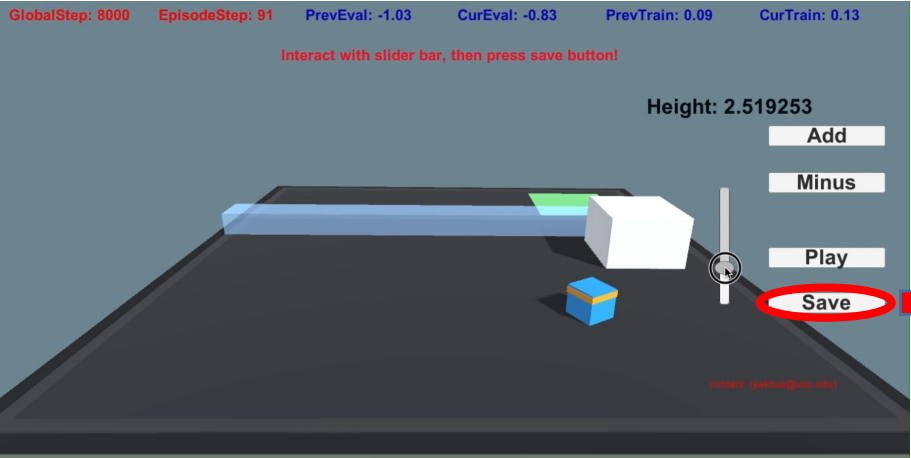
Add and Minus finetunes the wall height. Or use the slider bar.



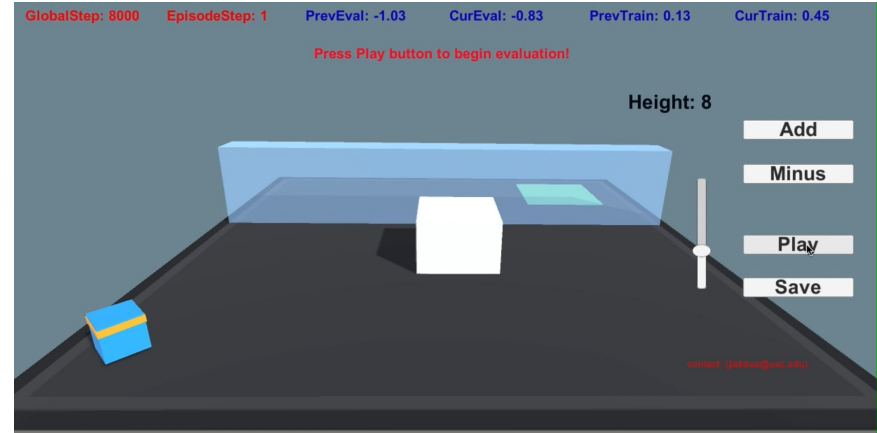
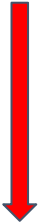
Slide the wall height bar to change the height, the higher the more difficult to learn.

Once the decision is made **click on "Save"** to save the design.

Others.



The window will be minimized after pressing save as shown below.



Will be maximized for playing and interaction.