

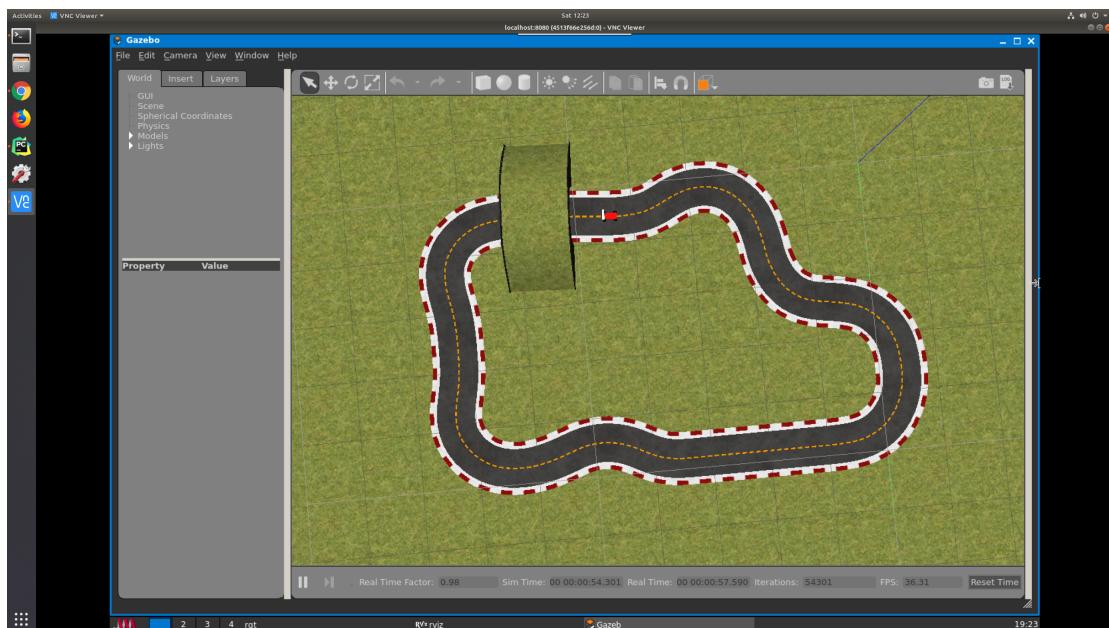
How to Run DeepRacer Locally to Save your Wallet



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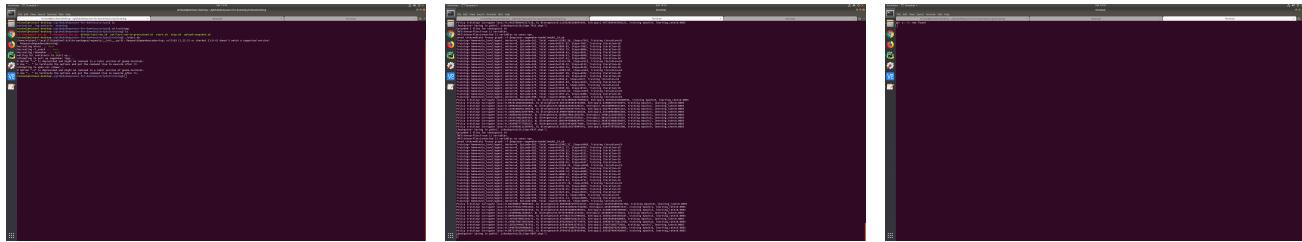
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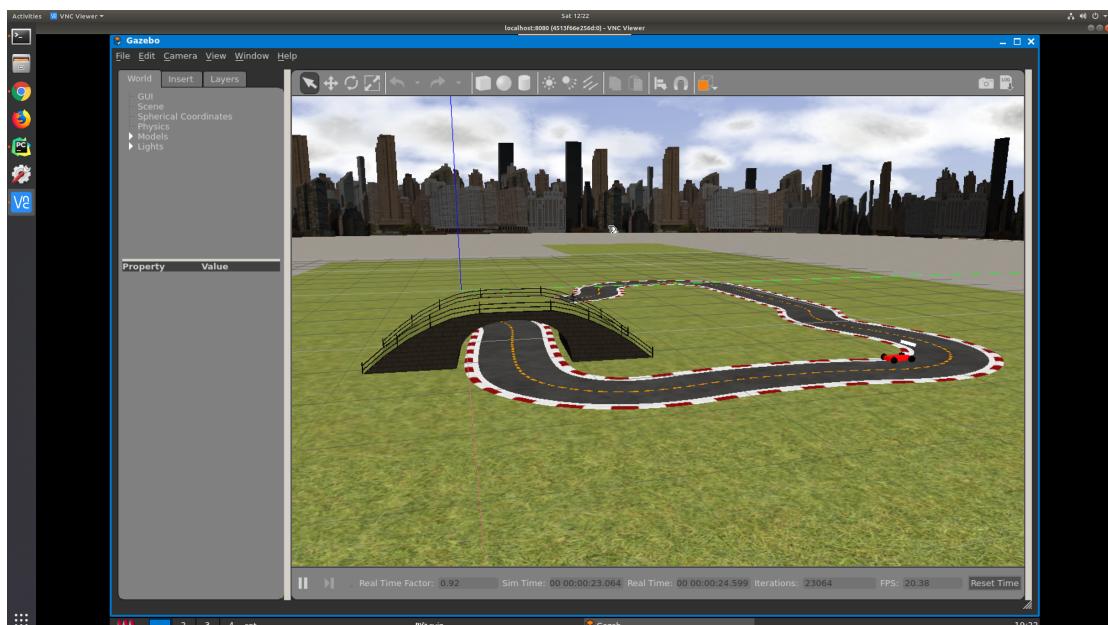


AWS DeepRacer training locally on the New York Track

The AWS DeepRacer can be expensive. With some top competitors in the league spending +\$700 to train their DeepRacers and learn how to do it effectively the activity can be very cost-prohibitive. Plus, if you are like me, you want total control over the training of your model and the ability to use RL algorithms that AWS does not provide (as of writing this they only provide PPO). In this tutorial, I will walk you through how to run the DeepRacer locally on your Ubuntu (I am using 18.04) machine with docker. I will also show places



A VNC window should also open up showing the DeepRacer simulation. After everything boots up correctly you should see the DeepRacer start learning by racing around the track just as it does in the AWS DeepRacer console. The simulation backend is all through ROS which is easy to tinker with if you like to add your world or adjust the car to your liking. You no longer need to deal with the restrictions placed by the DeepRacer console so see what you can come up with!



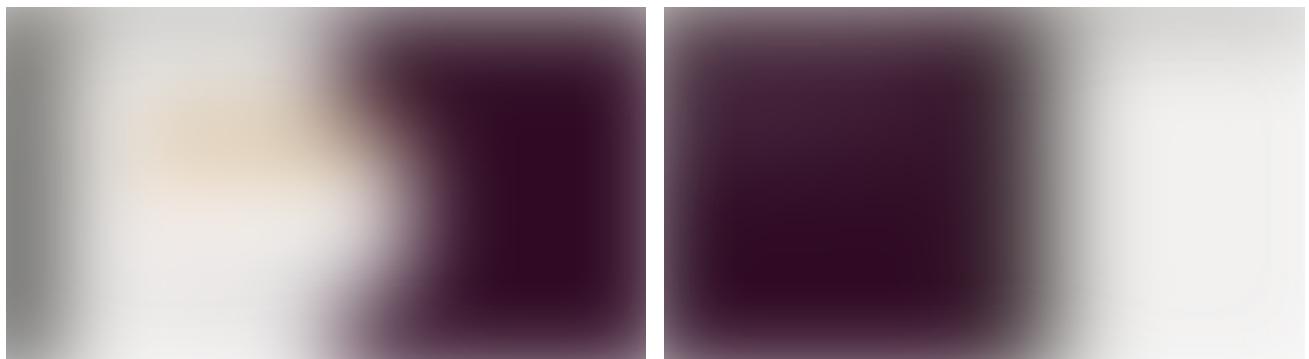
If sagemaker does not start correctly (you can check by doing a `docker ps` and seeing if the sage maker container is running) try running `docker images` to see if the image installed correctly. If not you should go through the steps in this repo under Sagemaker to get the image all setup.

The DeepRacer repo provided by Alex Schultz also contains

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After spending some time working with the local simulation I have found that the checkpoint files for the DeepRacer quickly start eating away at your storage. To delete the checkpoint files, as you might want to do frequently so the simulation does not crash after using up all your machines available space, run `sudo rm -R ~/github/deepracer-for-dummies/docker/volumes/robo/checkpoint/checkpoint` . That should empty your checkpoint folder assuming that you cloned the deepracer-for-dummies into the github folder in your root directory.



I have recently released a local DeepRacer console or graphical user interface (GUI) to make the experience of running the DeepRacer better. You can check it out here.

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