Weekly Report （5.26-6.01）

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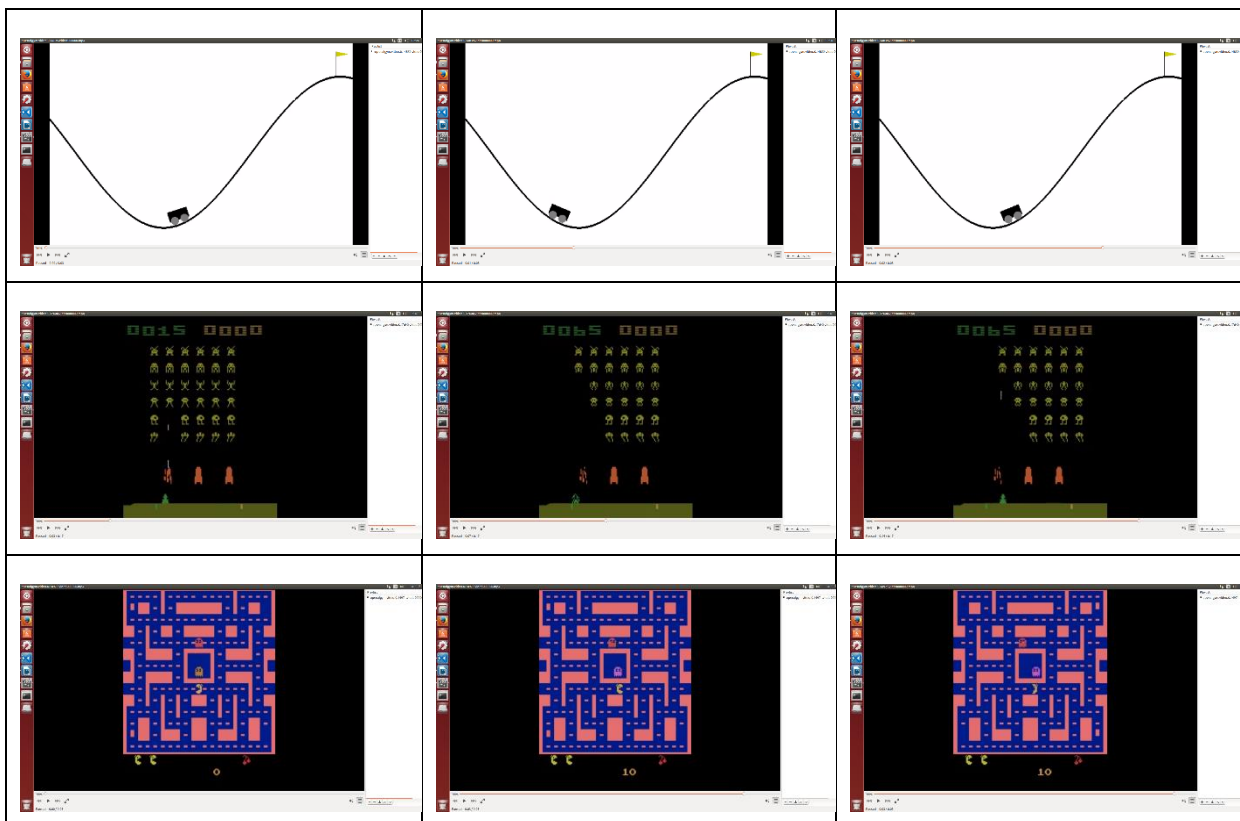miaodx@tju.edu.cn

1. Task Description

   a)   Try openai gym project.

   b)   Try openai universe project.

2. Task Progress

   a)   Try openai gym project.

It is pretty straight forward to use the gym and make it run, since what we need is only a python environment in Linux platform (windows is not officially supported and can have some unpleasant results).
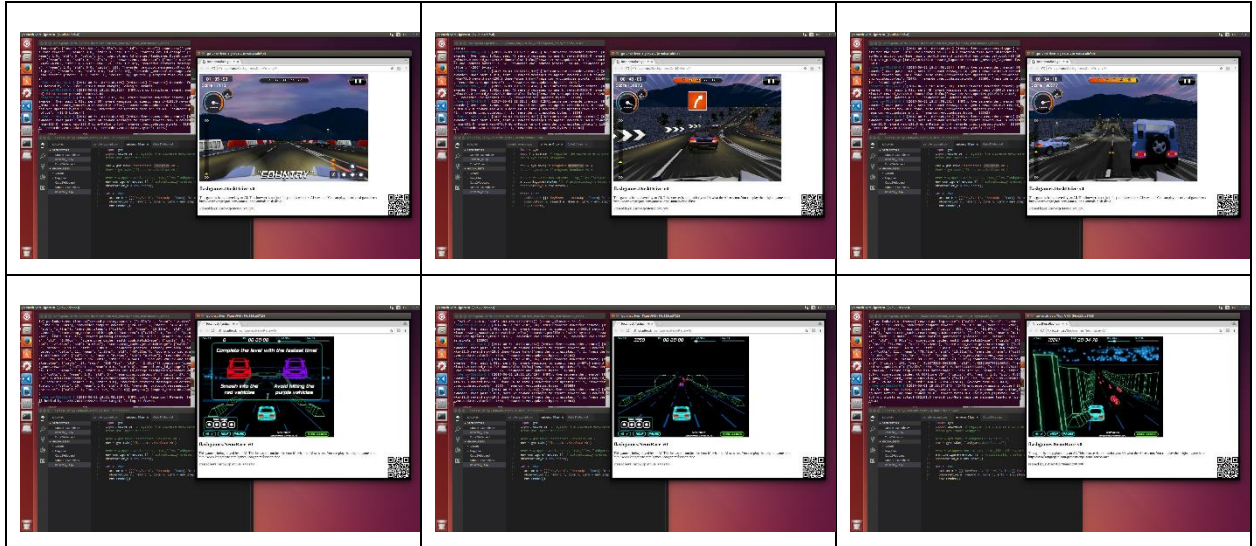
Some screenshots are listed below:

First row is MountainCar example, second is SpaceInvaders, while the last row is Pacman.

b) Try openai universe project

Compared with gym, this can be a little difficult, since it requires some additional tools, such as docker. However, it's can be done with patience and follow the instruction.

Some screenshots are listed below:

First row is DuskDrive example, second is NeonRace, both of them are care racing games.

3. Existed Main Problems and Solutions

This week's job is just to use the openai platform, and this is much more doable than last week's GTA V experiments. So no too much problems show up.

However, what the openai dose is somewhat more than my intension, I want to get data from the platform and do some other programming works on the dataset. While they are just providing a whole platform, not only the data, but also interfaces for users to upload their codes/algorithms and run in their environments and thus compete with each other and/or get benefit from all the participants.

4. Working Plan for Next Week

Like mentioned in part 3 and the fact that I failed to reproduce the GTA V experiments, so next week I will concentrate on the UnrealCV project, and get hundreds or thousands of images from it and do some DL experiments on them. And get prepared for the paper writing work.

REFERENCES

Since most of my references are links on the internet, I just list the links instead of use the more official cite format.

[1]   MuJoCo, http://www.mujoco.org/index.html

[2]   OpenAI, https://openai.com/