Getting Started: Reinforcement Learning with OpenAI Gym and MuJoCo

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1 Requirements

Use a Linux computer and Python 3.6. If you are running a GPU, make sure you install tensorflow-gpu. It is likely that you will need the Ubuntu drivers for your GPU instead of Nvidia's.

2 Install OpenAI Gym

1. Install the dependencies listed in 'requirements.txt' on https://github.com/openai/gym

```
git clone https://github.com/openai/gym.git
cd gym
pip install -e [all]
```

3 Install MuJoCo

- 1. Download version 1.50 from http://mujoco.org/. Unzip the downloaded mujoco150 directory into /.mujoco/mujoco150
- 2. MuJoCo has a free 1 year for students. Sign up at the following link, and they will send you an email with the license file. https://www.roboti.us/license.html
- 3. When you have received the email from MuJoCo, copy the attached file 'mjkey.txt' to the sub-directory /.mujoco/mujoco150/bin

4 Install mujoco-py

- 1. Install the dependencies in 'requirements.txt' on the mujoco-py Github page. https://github.com/openai/mujoco-py
- 2. Install version 1.50.1.56 of mujoco-py from https://github.com/openai/mujoco-py/

```
git clone https://github.com/openai/mujoco-py.git cd mujoco-py pip install –no-cache-dir -e .
```

3. Try the following test script.

```
import gym
env = gym.make('Ant-v2')
env.render()
```

Exploration in Computer Science Research: Deep Reinforcement Learning (CS 6101, 2019), National University of Singapore.

4. I encountered a 'GLEW initialization error' when trying the code above. This thread on Github may help; look towards the bottom for a post by CrazyThinking. https://github.com/openai/mujoco-py/pull/145