

## MSBA – Optimization 2

### Instructions for Atari with python

There are separate instructions for doing this on your machine and on Colab. Before you can do either, there are a few steps you need to follow.

- 1) Go to [http://www.atarimania.com/rom\\_collection\\_archive\\_atari\\_2600\\_roms.html](http://www.atarimania.com/rom_collection_archive_atari_2600_roms.html)
- 2) Download the roms file at the bottom of the page
  - This is a .rar file
- 3) Extract the .rar file
  - If you're on a Mac, download 'The Unarchiver' from the app store
  - If you're on a Windows machine, download 7-zip
- 4) The extracted folder contains 2 .zip files, leave these files alone, just remember where they're saved on your computer

Follow these instructions if you want to play Atari on your own machine:

- 1) Run the following 3 lines in your Terminal/AnacondaPrompt
  - `conda install gym`
  - `conda install gym[atari]`
  - `python -m atari_py.import_roms /location/of/ROMs/`

You could also use pip instead of conda. In step c, /location/of/ROMs/ is the location on your machine where you saved those 2 .zip files. For example, on my Mac I saved them in a folder on my desktop, so I ran

- `python -m atari_py.import_roms /users/Dan/Desktop/Roms/`

If you use pip instead of conda, you may also have to run

- `pip install atari-py`

before you import the roms.

- 2) In your jupyter notebook just import gym and you're good to go!

Follow these instructions if you want to play Atari on Colab:

- 1) Gym is already installed in Colab, but it doesn't have the Atari roms
- 2) Upload those 2 .zip files somewhere on your GoogleDrive
- 3) Give your Colab notebook access to your GoogleDrive
  - `from google.colab import drive`
  - `drive.mount('/content/drive')`
  - Follow the pop-up window instructions
- 4) In your Colab notebook run the following line
  - `!python -m atari_py.import_roms /location/of/ROMs/`

Here, /location/of/ROMs/ is the location on your GoogleDrive of those .zip files. For example, I created a folder called Roms in my GoogleDrive, so I ran

  - `!python -m atari_py.import_roms /content/drive/MyDrive/Roms/`
- 5) In your Colab notebook just import gym and you're good to go!
- 6) You'll have to redo steps 3-5 every time you open your Colab notebook

After you follow these instructions, you can check that it worked by running the `atari_check.ipynb` notebook that's on canvas.