

AI Lab - Tutorial

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The OpenAI Gym Framework

What is it

Gym is a toolkit for developing and comparing autonomous agents, focusing specifically on reinforcement learning algorithms.

It supports teaching agents everything from walking to playing games like Pong or Pinball

What is it for

- An open-source collection of environments that can be used for benchmarks
- A standardized set of tools to define and to work with environments

Where to find it

<https://gym.openai.com>

Installation Process

During the lab lessons we will use Jupyter notebook files. In order to use these files you should install the following dependencies.

Detailed guide for the installation process:

https://github.com/vrncst/AI_Lab

- Download the *Miniconda* package manager:
<https://docs.anaconda.com/free/miniconda/>
- Install Conda on your system
- Open a terminal and digit:

```
> git clone https://github.com/vrncst/AI_Lab
> cd AI_Lab
> conda env create -f tools/ai-lab-env.yml
> conda activate ai-lab
```

To open the tutorial:

- Navigate to your local AI_Lab folder.
- Ensure that you have activated the *ai-lab* conda environment and launch Jupyter Notebook (> jupyter notebook) from your folder
- Navigate with your browser to: *tutorial/tutorial.ipynb*