

## Assignment 1: Imitation Learning

**Due October 14, 23:59**

### 1 Editing Code

The starter code provides an expert policy for each of the MuJoCo tasks in OpenAI Gym. Fill in the blanks in the code marked with TODO to implement behavioral cloning. A command for running behavioral cloning is given in the README file.

We recommend that you read the files in the following order.

- scripts/run\_hw1.py (training loop)
- policies/MLP\_policy.py (policy definition)
- infrastructure/replay\_buffer.py (stores training trajectories)
- infrastructure/utils.py (utilities for sampling trajectories from a policy)
- infrastructure/pytorch\_utils.py (utilities for converting between NumPy/Pytorch)

For some files, some important functionality is missing and is marked with TODO.

Specifically, you are asked to implement parts of the following:

- policies/MLP\_policy.py: update function
- infrastructure/utils.py: sample\_trajectory function
- scripts/run\_hw1.py: run\_training\_loop function

### 2 Turning it in

Submit the following to Teams Assignment:

- Video with the actual results and some comments on your code
- Actual code in .zip file
- No links to your GitHub or plain .ipynb files allowed