Imitation-learning-project

Updates

Mar 19- Completed Adv-CQL in `CQL.py`.
Feb 28- Completed functioning of SAC in `SAC.py`.
Feb 22- Added custom utilities to `utils.py` with CNN Policies in `DDPG.py` and `TD3.py`.
Feb 18- `IL code base` is available. Refer to README and start programming.
Feb 16- Proposal is complete. Midterm report due March 10.

General Outline

The project aims to solve/build a single research idea by balancing its theory with empirical evaluation. We hope to begin by gaining intuition about the problem and addressing it on a simple toy task. The method can then be extended to non-trivial robot control tasks in order to compare its efficacy with baseline algorithms.

A longer list of papers is available here.

Tentative Schedule

Week	Task	Description	Completed
1	Literature Review	Brainstorm Ideas and jot down good ones	✓
2	Literature Review	Brainstorm Ideas, Meet with prof	✓
3	Formulate Problem	Setup the problem with potential solutions	✓
4	Implement Toy Problem	Solve base case and gain intuition	✓
5	Implement Toy Problem	Complete base case solution and interpret results	✓
6	Implement Algorithm	Solve main problem	✓
7	Implement Algorithm	Solve main problem	✓
9	Accumulate Results	Interpret and finalize results	✓
10	Write Report	Draft and finalize report	-
11	Wrap Project	Package code base and wrap ppt	-