Project 1—ECE590–001

1/15/2020

Description: You will be assigned to a group to adequately mix up interactions and experiences. You will present one of the named algorithms below. You will provide a beamer presentation deck as an artifact for your group. Successful presentations will start with the nice summaries written in spinning up, but expand along axes of inquiry like: in the original paper what were the key points and takeaways and what was novel. You should include some demonstrations/explorations of these algorithms running for gym environments (key feature of spinning up is you have access to these algorithms and you can play with them).

Guidance: I will interact with the groups during the preparation of the presentation to insure that the beamer artifact covers all it needs to. I will also help outline and troubleshoot them as necessary.

Timing: Presentations will be 12 Feb 2020 and 14 Feb 2020 (during discussion section). They should last about 20 minutes.

Version Control: Please make public fork of this repo and develop your materials in the appropriate directory.

- Group 1: Present Vanilla Policy Gradient with generalized advantage estimation. Start here: https://spinningup.openai.com/en/latest/algorithms/vpg.html.
- Group 2: Present Trust Region Policy Optimization. Start here: https://spinningup.openai.com/en/latest/algorithms/trpo.html
- Group 3: Present Proximal Policy Optimization. Start here: https://spinningup.openai.com/en/latest/algorithms/ppo.html
- Group 4: Present Deep Deterministic Policy Gradient. Start here: https://spinningup.openai.com/en/latest/algorithms/ddpg.html