Motivation: Facilitate research in multitask RL

MTRL: Baselines for Multitask RL

- MTRL has two building blocks: (i) Base (single-task) policy and (ii) Components to augment the base policy for multi-task setup.
- The ideal workflow is to start with a base policy and add multi-task components as they serve.
- The components may or may not bring a lot of freedom and flexibility to the user.

MTRL Design

- Builds on OpenAI Gym.
- MTRL provides two guiding principles: (i) Make minimal changes to the Gym interface (which the community is very familiar with) and (ii) Make it easy to port existing MTEnv - task environments for multi-task setup.
- The components are (output layers) task SAC and can be selected on the fly, based on the task.
- The ideal workflow is to start with a base policy and add multi-task components as they serve.

Direction of Development

- Supporting more environments
- Supporting more more algorithms
- Scaling and ease of use
- Performance optimizations
- Adding examples of complex training pipelines
- Adding of new base policies

References


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Links

MTEnv website: https://facebookresearch.github.io/mtenv/
MTRL website: https://github.com/mtrl/mtrl
Chat: https://t.me/mTRLchat/