Lanxin Lei

List of projects made in mmlab

- **Exploration more for potentially good actions**
  - Implemented the method that made use of shorter estimations to encourage actions with potential of being good.
    - https://github.com/LanxinL/minMaxExp
    - Invitation link: https://github.com/LanxinL/minMaxExp/invitations
  - Preparing for submitting the project to NeurIPS 2019.

- **Exploit in exploration**
  - Implemented the method that used the signs of advantage value to train a discriminator for improving sampling efficiency of policy, trained in the Mujoco environments.
    - https://github.com/LanxinL/GanRl/tree/repo/gan_fixStd_extra_item
    - Invitation link: https://github.com/LanxinL/GanRl/invitations
  - Submission of ICML 2019.

- **Sub-Environments**
  - Created two sub-environments for Arm3D environment to make reward designing easier.
    - https://github.com/LanxinL/arm3dENV
    - Invitation link: https://github.com/LanxinL/arm3dENV/invitations
  - Implemented the method that parallelly trained both the sub-environments and the initial environment.
    - https://github.com/LanxinL/arm3d
    - Invitation link: https://github.com/LanxinL/arm3d/invitations
  - Validated the effectiveness of the method in a toy simulator, a grid world with one single line.
    - https://github.com/LanxinL/Q-learning-Gridworld
    - Invitation link: https://github.com/LanxinL/Q-learning-Gridworld/invitations

- **Visualization tool**
  - For the outputs of all the seeds under the same parameters' setting, the tool can draw them into a single curve, which makes the comparison of performance easier.
    - https://github.com/LanxinL/plotViaSeaborn
    - Invitation link: https://github.com/LanxinL/plotViaSeaborn/invitations