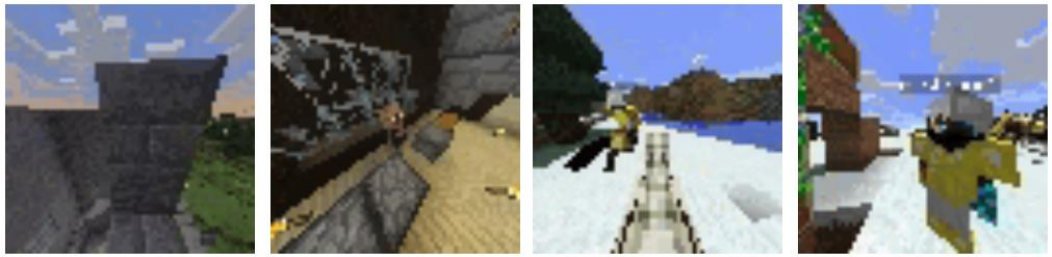
Project – NeurIPS 2020: MineRL Competition

- The MineRL 2020 Competition aims to foster the development of algorithms which can efficiently leverage human demonstrations to drastically reduce the number of samples needed to solve complex, hierarchical, and sparse environments.



Carnegie Mellon University Microsoft Preferred Networks DeepMind OpenAI

Participate in MineRL

- You can form a team up to 2 members to participate.
- (10%) Read MineRL Competition Page carefully.
- (10%) Setup environment with https://github.com/minerllabs/minerl and https://github.com/minerllabs/competition_submission_template.
- (40%) Run at least two baselines from Example Baselines - A set of competition and non-competition baselines for provided minerl. You need to write a brief summary about the algorithm, and competition results (*reward*) of each baseline you choose.
  - (optional) Some of the baselines are not covered in our 13 增强学习 chapter, you can refer to http://rail.eecs.berkeley.edu/deeprlcourse-fa18/ to learn those more advanced reinforcement learning algorithms
- (40%) Design your own method of learning to play Minecraft. There are many ways: choosing better architecture, reward shaping, tuning parameters, and even adding creative rules to your policy. Include your final strategy and score in your report.
  - You're allowed to look at open-source code by others in the competition and even use them as a starting point if you feel the task is too challenging and you're going nowhere, *as long as you add references in the report and point out the difference to your strategy.*
- (Bonus) Teams with top-3 highest ranks will get bonus scores and will be invited to share their work (optional).
- Have fun!