

Is xLand-minigrid scalable?

Research. Written in JAX, XLand-MiniGrid is designed to be highly scalable and capable of running on GPU or TPU accelerators, and can achieve millions of steps per second. In addition, we have implemented easy-to-use baselines and provided preliminary analysis of their performance and generalization, showing that the proposed benchmarks are challenging.

Can xLand-minigrid help practitioners perform meta-reinforcement learning experiments faster?

Execution time. While we do not introduce any novel algorithmic improvements in our work, we hope that the proposed highly scalable XLand-MiniGrid environments will help practitioners perform meta-reinforcement learning experiments at scale faster and with fewer resources.

What is xLand-minigrid environment interface?

Similar to Jumanji (Bonnet et al., 2023), XLand-MiniGrid Environment interface is inspired by the `dm_env` API (Mudgal et al., 2019), which is particularly well suited for the meta-RL, as it separates episodes from trials by design (see Section D.1). Thus, each environment should provide jit-compatible `reset`, `reset_trial` and `step` methods.

How many rules can xLand-minigrid use?

Full-scale XLand environment can use more than five rules according to the Team et al. (2023). To test XLand-MiniGrid in similar conditions we report simulation throughput varying number of rules. For testing purposes we just replicated same NEAR rule multiple times in the PutNear environment.

Does xLand support multi-agent simulations?

Library. Compared to the full-scale XLand (Team et al., 2021, 2023), we do not currently support multi-agent simulations, procedural generation of complex worlds, rules with multiple output entities, or goal completion.

XLand-MiniGrid is a suite of tools and grid-world environments for meta-reinforcement learning research that can potentially run on GPU or TPU accelerators, democratizing large-scale ...

**Abstract:** Inspired by the diversity and depth of XLand and the simplicity and minimalism of MiniGrid, we present XLand-MiniGrid, a suite of tools and grid-world ...

Inspired by the diversity and depth of XLand and the simplicity and minimalism of MiniGrid, we present XLand-MiniGrid, a suite of tools and grid-world environments for meta-reinforcement ...

We present XLand-MiniGrid, a suite of tools and grid-world environments for meta-reinforcement learning research inspired by the diversity and depth of XLand and the ...



# Xland minigrid The Netherlands

XLand-MiniGrid ??????????????????,??? XLand ??????,?? MiniGrid ?????????????????? JAX ??????,?? ...

XLand-MiniGrid ??????????????????,??? XLand ??????,?? MiniGrid ?????????????????? JAX  
?????,?????????,?????????????????

Abstract: Inspired by the diversity and depth of XLand and the simplicity and minimalism of MiniGrid, we present XLand-MiniGrid, a suite of tools and grid-world environments for meta-reinforcement learning research. Written in JAX, XLand-MiniGrid is designed to be highly scalable and can potentially run on GPU or TPU accelerators, democratizing ...

Written in JAX, XLand-MiniGrid is designed to be highly scalable and can potentially run on GPU or TPU accelerators, democratizing large-scale experimentation with ...

We present XLand-MiniGrid, a suite of tools and grid-world environments for meta-reinforcement learning research inspired by the diversity and depth of XLand and the simplicity and minimalism of MiniGrid. XLand-Minigrid is written in JAX, designed to be highly scalable, and can potentially run on GPU or TPU accelerators, democratizing large ...

XLand-MiniGrid is a suite of tools, grid-world environments and benchmarks for meta-reinforcement learning research inspired by the diversity and depth of XLand and the simplicity and minimalism of MiniGrid. Despite the similarities, XLand-MiniGrid is written in JAX from scratch and designed to be highly scalable, democratizing large-scale ...

Inspired by the diversity and depth of XLand and the simplicity and minimalism of MiniGrid, we present XLand-MiniGrid, a suite of tools and grid-world environ-ments for meta-reinforcement learning research. Written in JAX, XLand-MiniGrid is designed to be highly scalable and can potentially run on GPU or TPU acceler-

XLand-MiniGrid is a suite of tools and grid-world environments for meta-reinforcement learning research that can potentially run on GPU or TPU accelerators, democratizing large-scale experimentation with limited resources.

XLand-MiniGrid is a suite of tools, grid-world environments and benchmarks for meta-reinforcement learning research inspired by the diversity and depth of XLand and the simplicity ...

Written in JAX, XLand-MiniGrid is designed to be highly scalable and can potentially run on GPU or TPU accelerators, democratizing large-scale experimentation with limited resources. Along with the environments, XLand-MiniGrid provides pre-sampled benchmarks with millions of unique tasks of varying difficulty and easy-to-use baselines that ...

Written in JAX, XLand-MiniGrid is designed to be highly scalable and can potentially run on GPU or TPU



# Xland minigrid The Netherlands

accelerators, democratizing large-scale experimentation with limited resources.

Web: <https://ssn.com.pl>

