challenging Montezuma's Revenge intrinsic motivation in RL
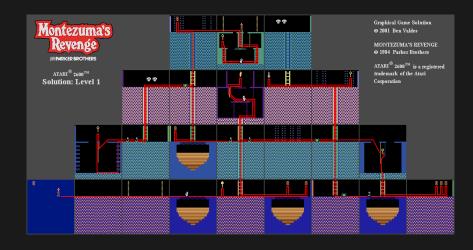## Michal CHOVANEC

Montezuma's Revenge

Montezuma's Revenge

- **very sparse rewards** - hundrets of steps
- **huge state space**
- **hard exploration**
- **needs returns back**

highlighted score

year	name	score
2015	Deep Reinforcement Learning with Double Q-learning	0
2021	MuZero	2500
2018	Count-Based Exploration with Neural Density Models [1]	3705
2019	**Exploration by Random Network Distillation [2]**	**8152**
2021	GoExplore* [3]	43 000

* : requires environment state saving/loading

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[1] https://arxiv.org/abs/1703.01310
[2] https://arxiv.org/abs/1810.12894
[3] https://arxiv.org/abs/2004.12919

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random network distillation