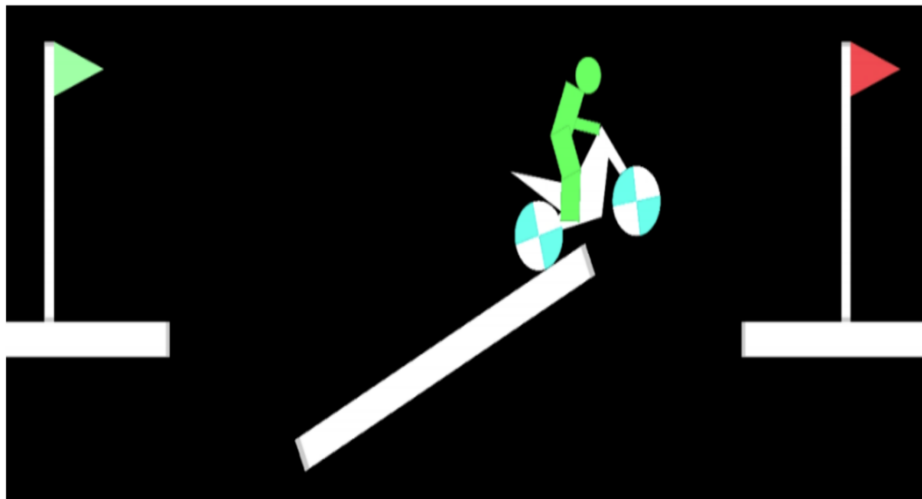




SA:

Live Content Generation in Momentum-Based Games

Recently it has been shown that adversarial Reinforcement Learning can be used for procedural content generation in video games (ARLPCG).¹ The generator learns how to create nontrivially traversable environments while the solver learns how to navigate them.



In this semester project we want to build a content generator for a momentum-based game using an ARLPCG approach. The content should be generated in an iterative online fashion that takes the current momentum of the player into account to ensure solvability of upcoming segments that are outside of the players vision. The generated environments should also follow a progression (e.g. increasing difficulty) and be different everytime you play.

Requirements: Strong motivation, programming skills, and basic knowledge of machine and deep learning as well as reinforcement learning.

Interested? Please contact us for more details!

Contact

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¹Linus Gisslen et al. *Adversarial Reinforcement Learning for Procedural Content Generation*. 2021. arXiv: 2103.04847 [cs.LG].