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Assignment 10

Probably my most desired subfield of Computer Science is Game Development. So whenever I get a project/assignment in a class, I immediately try to find a way to apply the concepts being taught in that particular project, to game development. After I read the prompt for this week's assignment, I thought of a Youtube channel that I am subscribed to that very concisely and in an entertaining manner, summarizes various papers the channel owner finds interesting. One of the first papers I ever watched from this channel was an explanation of research being done by OpenAI using the concept of Hide and Seek. The ML method that they used in this research is I believe to be unsupervised ML. It is mentioned in the paper that the program has been run millions of times in which data from these instances have been collected and used to improve the outcomes of this simulation. The basic premise of the simulation is that two pairs of AI are placed in an environment where one pair is tasked to find the other pair. Basically Hide and Seek. They are provided with various tools such as cubes, ramps, movable and immovable walls. The results are very fascinating, with instances where the AI are even able to break the built in physics system for the simulation to fulfill their tasks.

Youtube Video:

https://www.youtube.com/watch?v=Lu56xVIZ40M&ab_channel=TwoMinutePapers

Paper:

<https://arxiv.org/pdf/1909.07528.pdf>