PREY-PREDATOR IN A MAZE WITH REINFORCEMENT LEARNING

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INTRODUCCION

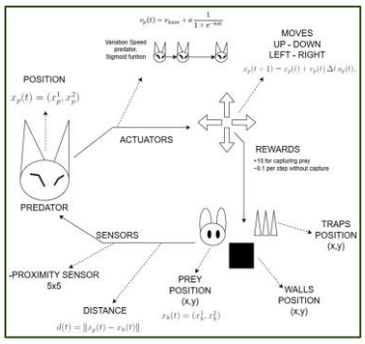
Prey-Predator in a maze is a complex system that involves two autonomous cybernetic agents that interact in a environment like a maze.
Each agents has been trained with reinforcement learning to maximize its objective.
Prey tries maximize the survival time.
Predator tries minimize hunting time.

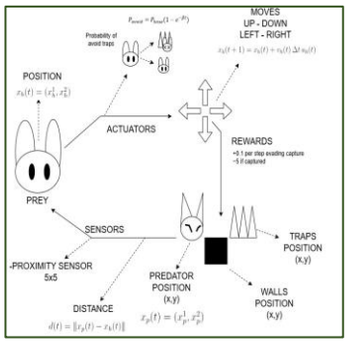
GOAL

We design a system using AI principles and cybernetic foundations. Or goal is develop a functional system with two cybernetics agents in a competition scenery.

METHODOLOGY

Starting with the design of one adaptative agent.
-Receive inputs by virtual sensors.
-Process information in subsystems.
-Acts with actuators that affect the env.
-Generate an output.





With model created, use the reinforcement learning algorithms like DQN for train the agents and finale prove.

RESULTS

[COMING SOON].

CONCLUSION

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REFERENCES

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