TIC-TAC-TOE

Evolutionary AI Project

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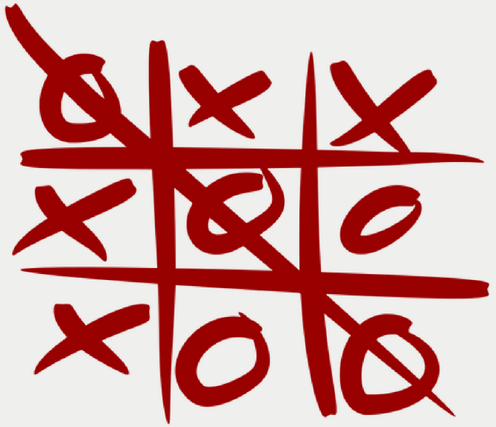

IMPLEMENTATION

Use evo.py from lecture to optimize Tic Tac Toe **strategies**. Reward strategies the win more often.

No data necessary!

GOALS

- This project aims to use evolutionary computing to train a Tic Tac Toe AI
- To introduce genetic diversity to the game using small random changes in the probability for each move
- Only the top strategies survive and reproduce

TECHNIQUES

- mutation and reproduction
- Simulate games to evaluate strategy fitness
- Hyperparameters to control the magnitude of changes

plotly

[to track performance on a dashboard]

FUTURE WORK

- use a more efficient encoding make the time needed to evolve a strong AI significant shorter.

(hopeful)
OUTCOMES
the resulting top AI should converge into an optimal strategy that always wins or draws.