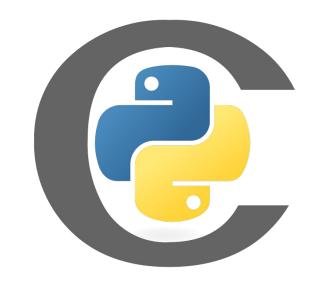
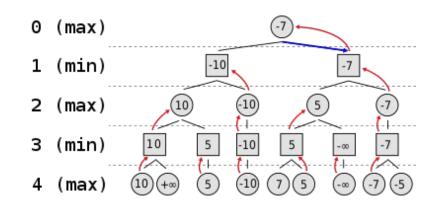


Introduction

- Python (Cython)
- MiniMax Alfa Beta
- Transposition Table
- Genetic algorithm





Heuristics

- Number of pawns
- Average Manhattan distance to the king
- Surrounding ratio
- Minimum distance to free escape tile



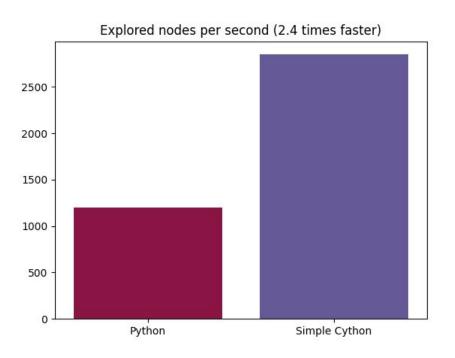


Genetic algorithm

- 50 epochs of 5 games
- Fitness: the quicker to win the better
- Selection: higher probability for the fittest individuals
- Crossover
- Mutation

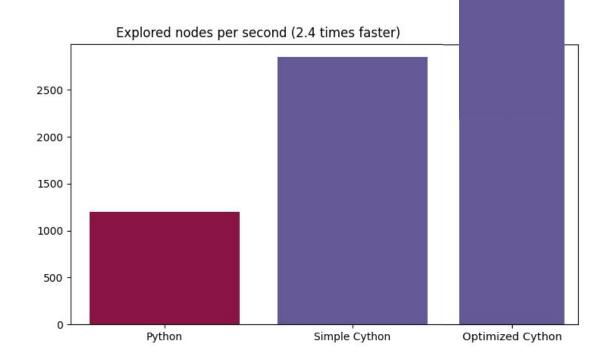
Python Benchmarks

Comparing explored nodes per second



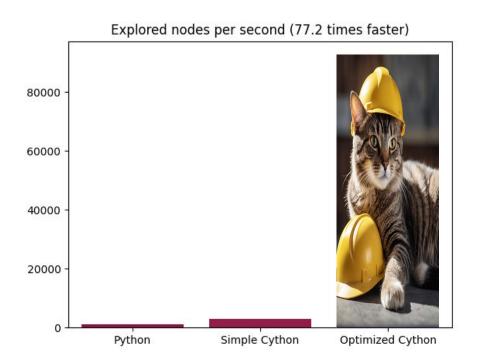
Python Benchmarks

Comparing explored nodes per second



Python Benchmarks

Comparing explored nodes per second







NO cat has been harmed in the making of this presentation