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INF

FAKULTÄT FÜR
INFORMATIK

Computational Intelligence in Games

emergence

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Concepts I

- ActionTimer
- GameTree with expanding strategies
  - OneStep
  - LevelOrder
  - Greedy using a heuristic
  - AStar using a heuristic

Concepts II

- Heuristic that has an equation with weights w

$w_0 \cdot currentScore +$

$w_1 \cdot distToNearest(NPC.type1) +$

$w_2 \cdot distToNearest(NPC.type2) +$

...

- Used a random generator for the weights
- Look for the performance $\rightarrow$ sometimes it was good
- But only on the trained game!

Concepts III

- Constructor
  - Use an HeuristicEnsemble and expand the game tree for each Heuristic
  - Rate the different heuristics
  - For better performance use only one game tree
- Act
  - Just act like the best heuristic that was found at construction time

Thank you for your attention!