

TUD? no. TUT!

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TUT - Structure

GameAnalyser

SinglePlayer

ID + MC

Zerosum,
Turntaking &
2 Player

MINIMAX +
MC

everything
else

MC UCT

Conditional Plan

SinglePlayer

Iterative Deepening

Blind Search

in Background:

MonteCarlo Simulations

- found a goalValue > 0
- go in this Direction
- find better solution

- found goalValue = 100
- yeah we won!! --

Zerosum & Turntaking

Minimax

- basic minimax with alpha/beta cutoff and hashing
- Killer-Heuristic: sorting nodes for better alpha/beta

in Background:

MonteCarlo Simulations

- found a terminal
- give to Evaluator

Heuristics:

- Mobility & inverse Mobility
- Piececount & inverse Piececount
- Novelty & Distance from initial
- Distance to Goal

Heuristic Evaluator

- game won: take heuristics with high values
- game lost: take heuristics with low values

not turntaking || not
zerosum || special cases

MC UCT

(Monte Carlo - Upper Confidence bounds applied to Trees)