
Algorithm 1 myAIAAlgorithm

Input List<positionTicTacToe> *board*, int *player*

Return positionTicTacToe *myNextMove*

procedure MYAIALGORITHM(*board*, *player*)

 initialization

$winMove \leftarrow getWinMove(player)$ ▷ If we have a win move

if *winMove* exists **then**

return *winMove*

$forceMove \leftarrow getForceMove(player)$ ▷ If we have a force move

if *forceMove* exists **then**

return *forceMove*

$coreMove \leftarrow getFirstTwoSteps(player)$ ▷ Occupy the strongest points

if *coreMove* exists **then**

return *coreMove*

$maxValue = -\infty$

$positionTicTacToe\ myNextMove$

do ▷ Progressive deepening

for <each available move *curMove*> **do**

 <make current move>

$newVale = miniMax(depth, player, false, -\infty, +\infty)$

if *newValue* > *maxValue* **then**

$maxValue = newValue$

$myNextMove = curMove$

 <cancel current move>

▷ Backtracking

while <time is still enough>

Algorithm 2 miniMax

Input *int depth*, *int player*, **boolean** *maximizingPlayer*, **int** *alpha*, **int** *beta*

Return **int** *value*

procedure MINIMAX

if *depth* == 0 **then** ▷ search finish

return *evaluation(player)* ▷ evaluate the board configutaion

if *maximizingPlayer* **then** ▷ Maximizer

for <each available move *curMove*> **do**

 <make current move>

newVale = *miniMax(depth, player, false, -∞, +∞)*

if *newValue* > *maxValue* **then**

maxValue = *newValue*

myNextMove = *curMove*

 <cancel current move> ▷ Backtracking

else ▷ Minimizer

 aaa
