L09 – Minimax

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1 Adversarial Games (Brain Power)

1. setup graph each level is made of possible moves by 1 player

2. Utility ufnction – indicates the value of portal config

    (+) – when good for p1 () good for p2

1.1 During game

1. Determine if current node is min/max

2. Search succesor of node up to max depth

    apply utility function to leaf nodes

3. back up tree choosing min or max utility from children given node type

1.2 Utility function

1. features

2. $\sum_{i=1}^{N} w_i f_i(x)$

3. N = number of features

4. X = some config

HINT: ON THE EXAM HE MIGHT FUCK WITH US AND HAVE P2 GO FIRST

1.3 speed

1. This takes too long

2. idea – some paths are quickly found to be **not promising**

3. consider what node above know so far.

    Branch & Bound