

# Improvement of $\alpha - \beta$ pruning

- Set the depth limit
- Using EVAL (estimated function) instead of UTILITY
  - Properties: monotonically leads to optimality.
  - You don't need exact values
- Result: Depth 8 chess algorithm? Not still good enough...
- Other methods includes prior pruning...

# Meet with stochastic outcomes

- $\alpha - \beta$  pruning -> calculating the **expected** returned value
- EVAL function: need to be exact (or positive linear) to guarantee optimal

