



Expectimax Search

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Expectimax search is a search/decision-making algorithm that maximizes the average (expected) reward. It is typically applied to trees that have stochastic nodes, where the outcome of an action is uncertain. In minimax we assume a "smart" adversary, and thus consider worst-case outcomes (i.e. that the opponent plays their best move), with non-deterministic search, we instead consider average-case outcomes (i.e. expected utilities). So instead of minimax's min nodes, we have "chance" nodes, though we still keep max nodes. For a chance node, we compute its expected utility as the weighted (by probability) average of its children.