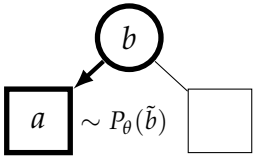
Selection

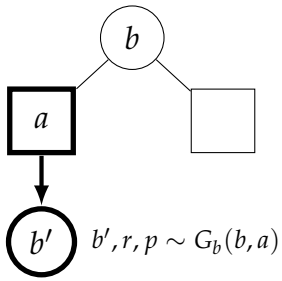


select action that maximizes

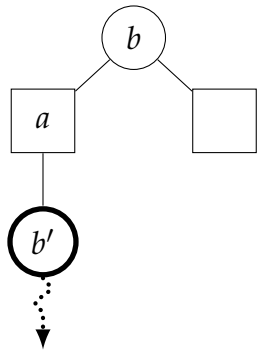
$$\bar{Q}(b,a) + c\left(P_\theta(\tilde{b},a)\frac{\sqrt{N(b)}}{1+N(b,a)}\right)$$

s.t. $F(b,a) \leq \Delta'(b)$

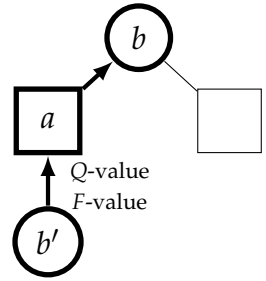
Expansion



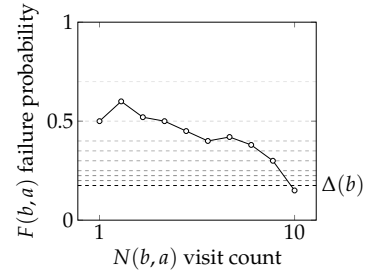
Simulation



Backpropagation



Adaptation



$$\text{err} = \mathbb{1}\{F(b,a) > \Delta(b)\}$$
$$\Delta(b) = \Delta(b) + \eta(\text{err} - \Delta_0)$$
$$\Delta'(b) = \max\{\Delta_0, \Delta(b)\}$$