

Bugsy
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1 Goal

2 Modules

Bugsy

Bugsy uses a utility function

$$\hat{U} = -(w_f \cdot g^*(s) + w_t \cdot d \cdot delay \cdot t_{exp})$$

to prioritize its search, where w_f , w_t are weights assigned by the user, g^* is the cost function of the current state's path, d is a distance metric, $delay$ is the estimated time between instantiation and expansion, and t_{exp} is the estimated time to expand a node.

The utilities of all states in the exploration space are updated and re-ordered after a power of two expansion count has been reached, otherwise the last re-ordering is used to pop off a heap.

The key is understanding how the utility function helps the search is dynamic programming.