Robust Sequential Search

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ABSTRACT. We study sequential search without priors. Our interest lies in decision rules that are close to being optimal under each prior and after each history. We call these rules dynamically robust. The search literature employs optimal rules based on cutoff strategies that are not dynamically robust. We derive dynamically robust rules and show that their performance exceeds 1/2 of the optimum against binary environments and 1/4 of the optimum against all environments. This performance improves substantially with the outside option value, for instance, it exceeds 2/3 of the optimum if the outside option exceeds 1/6 of the highest possible alternative.

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to check the status of the revision or to request the most recent update.