

# Multi-Armed Bandit Approach to Qualification Task Assignment across Multi Crowdsourcing Platforms

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Many existing optimization approaches deal with task assignments on one single crowdsourcing platform. This paper addresses the difficulties of the optimal platform selection for qualification tasks on one single platform. We proposed a novel approach to assigning qualification tasks to workers iteratively on multiple platforms to maximize the total number of collected qualified workers on a limited budget. We applied Multi-Armed Bandit (MAB) algorithms to create strategies for the platform selections to achieve this goal. The conducted experiments revealed that (1) the optimal platform is not always trivial, and (2) the strategies created by MAB algorithms can achieve high-quality assignments under different settings, which also satisfy different requesters' needs.

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