

An experimental study of exhaustive solutions for the Mastermind puzzle

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1. Highlights

This paper first presents a methodology for examining different methods for solving Mastermind. This methodology focuses not only on the search space reduction brought by each move, but also on the probability of playing the secret combination by chance (not only by reduction of the search space to one). Using this and applying it to two different Mastermind instances, we find out the reasons why different methods obtain their results and propose new methods that are able to robustly obtain good results on a par with the state-of-the-art methods.