

GENETIC ALGORITHM IN SOFTWARE TESTING OPTIMIZATION: A REVIEW

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Abstract: *The technological progress and software complexity makes difficult to maintain and improve the quality of software. Software testing is one of the main phases in software engineering. There are many testing methods which make the software free from error and provide the complete functional capabilities. Software testing requires a lot of time, work and money, and depends mainly on test case generation, execution and evaluation. Automated testing is a technique used to maximize test coverage, detect more errors, increase test execution, decrease cost as well as improving the quality of software. The use of genetic algorithm can help to improve the test cases. This paper proposed an algorithm which can be applied to both black box and white box testing to get some of the best test cases. The purpose is to implement the genetic algorithms to reduce: the test cases, cost, time and effort to give good quality software.*

Keywords: *software testing, genetic algorithm, test case.*