A Comparative Analysis of Optimization Techniques

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 131
Number 10

Year of Publication: 2015

Authors:
Kanika Tyagi, Kirti Tyagi

10.5120/ijca2015907399
{bibtex}2015907399.bib{/bibtex}

Abstract

Regression testing is an inescapable and very expensive task to be performed, often in a resource and time constrained environment. The goal is to minimize the time spent in the process of testing by reduction in the number of test cases to be used. Thus various techniques are being used for test case optimization, to select the less indistinguishable test cases while providing the best possible fault coverage. This paper presents a comparative analysis of the different test case optimization techniques. There are various optimization techniques available for the context. This review explains about the different optimization techniques on the basis of their evolution, methodology, performance and applications.

References

2. Chen, Jun, and Mahdi Mahfouf. ”Artificial immune systems as a bio-inspired optimization
A Comparative Analysis of Optimization Techniques

18. Hemlata S Urade and Prof. Rahila Patel. Article: Study and Analysis of Particle Swarm Optimization: A Review. IJCA Proceedings on 2nd National Conference on Information and
A Comparative Analysis of Optimization Techniques


36. Krause, Jonas, Jelson Cordeiro, Rafael Stubs Parpinelli, and Heitor Silverio Lopes. "A survey of swarm algorithms applied to discrete optimization problems." Swarm Intelligence and

**Index Terms**

Computer Science  
Information Sciences

**Keywords**

Optimization techniques, evolution, applications, regression testing.