A Parallel Early Binding Recursive Ant Colony Optimization (PEB-RAC) Approach for Generating Optimized Auto Test Cases from Programming Inputs

Volume 136

Number 3

Year of Publication: 2016

Authors:

Yogita Dubey, Divakar Singh, Anju Singh

10.5120/ijca2016908420

Abstract

Software testing is one of the most important parts of the software development. It also takes too much time to complete, because there are test cases are used for the testing of the software. So data mining techniques are used to improve the performance of the testing by reducing the size of the test cases. In this paper a Parallel Early Binding Recursive Ant Colony (PEB-RAC) System technique is presented with automated testing to provide an efficient way of the software testing. A result analysis is shown in the result section, this analysis shows that proposed technique provide better result as compare to the other technique.

References

1. Paramjit Kaur, Rupinder Kaur “approaches to generating test cases automatically to test the software” IJEAT, Vol. 2 Issue 3, and February 2013.

4. Lilly Ramesh, G.V. Uma “reliable mining of automatically generated test cases from software requirement specification” Vol.7, Issue 1, No. 3, January 2010.


11. P. Samuel R. Mall A.K. Bothra “Automatic test case generation using unified Modeling language (UML) state diagrams” Department of Computer Science and Engineering, Indian Institute of Technology, Kharagpur 721302, West Bengal, India E-mail: philips@cusat.ac.in.


17. Karl Nils Gunderson “An Application of Association Rule Mining To Unit Test Selection” Fargo North Dakota June 2013


21. Trupti A. Kumbhare, Prof. Santosh V. Chobe Associate Professor, DYPIET, Pimpri, Pune, India “An Overview of Association Rule Mining Algorithms” IJCSIT Vol. 5 (1), 2014,
927-930

22. Data Mining: Concepts and Techniques, 2nd Edition, Jiawei Han and Micheline Kamber, Morgan Kaufmann, 2006.


25. Laheeb M. Alzubaidy 1, Baraa S. Alhafid “Proposed Software Testing Using Intelligent techniques (Intelligent Water Drop (IWD) and Ant Colony Optimization Algorithm (ACO))” IJCSI, September 2013.


**Index Terms**

Computer Science                     Parallel Computing

**Keywords**

Optimization techniques, testing approach, auto case generation, SDLC