Abstract

To obtain the high quality software, there is a use of Mutation testing to measure the quality of our test suite. Fault insertion based techniques have been used for measuring test adequacy and testability of programs. Mutants are generated by introducing the faults in the original program. Tests Cases are adequate if they detect all the mutants. This paper describes a survey study to investigate the generation and execution of mutants.

References

- Wyb. Wyspian’skiego 27, 50370 Wrocław, Poland "Judy - A mutation testing tool"
for Java&quote;, Institute of Informatics, Wroclaw University of Technology, 2008.
- Yu-Seung Ma, Korea &quote;Description of Method-level Mutation Operators for Java&quote;, Electronics and Telecommunications Research Institute, March 20, 2005.
- Yu-Seung Ma, Korea &quote;Description of Class Mutation Mutation Operators for Java&quote;, Electronics and Telecommunications Research Institute, November 7, 2005.
- W. E. Wong &quot;On Mutation and Data Flow&quot; PhD thesis, Purdue University, West Lafayette, December 1993.
- A. Jefferson Offutt and J. Huffman Hayes &quot;A Semantic Model of Program Faults&quot;; ISSTA&amp;apos;96, San Diego CA, USA.
- De Millo and Offutt &quot;Experimental Results from an Automatic Test Case Generator&quot;; ACM Transaction on Software Engineering and Methodology, Vol 2, April 1993, Pages 109-127.
Automatic Generation and Execution of Mutants


Index Terms

Computer Science Software Engineering

Keywords
Software Testing Mutation Testing Mutation Testing Process Cost Reduction Mutants