Abstract

Software Quality is that significant nonfunctional requirement which is not fulfilled by many software products. In order to identify the faulty classes we can use prediction models using object oriented metrics. This paper empirically analyses the relationship between object oriented metrics and fault proneness of NASA Data sets using six machine Learning classifiers. It has been exhibited that Random Forest provides optimum values for accuracy, precision,
Validation of Software Quality Models using Machine Learning: An Empirical Study

sensitivity and specificity by performing Multivariate analysis of NASA Data sets.

References

- Huang, K. 2003. Discriminative Naive Bayesian Classifiers, Department of Computer Science and Engineering, the Chinese University of Hong Kong.
- http://nasa-softwaredefectdatasets.wikispaces.com/

Index Terms

Computer Science
Software Quality
Keywords