Abstract

There is a tremendous rise in cost of software, used in organizations. The cost of software ranges from hundred thousand to millions of dollars. The prediction of the software cost beforehand is the challenging area as the rough estimates and the actual cost varies with large differences. The traditional methods are being used since birth of software engineering. These methods based on current project needs, defines the cost based on appropriate weights assigned to scale factors and cost drivers. Application of artificial intelligence in software project planning has given a new methodology for Software Cost Estimation (SCE) that has improved, prediction accuracy. This methodology named Machine Learning Techniques (MLTs) lays emphasis on, similarity to past projects and correlation in the data (training data). Our research work has considered 10 projects along with their costs based on the cost drivers. Using Machine Learning Techniques (MLTs), the research tries to predict the cost, based on the cost drivers. The performance of MLTs was analyzed using root means square error and squared error.

References


Rish, I, 2001 An empirical study of naïve Bayes classifier, IJCAI workshop on empirical methods in artificial intelligence, pp. 41-46.


Index Terms

- Computer Science
- Artificial Intelligence

Keywords

- Fuzzy Logic
- Decision Tree
- NNPO
- Association Rules
- Linear Regression
- Perceptron
- Naïve Bayes
- Neural Network