Support Vector approach by using Radial Kernel Function for Prediction of Software Maintenance Effort on the basis of Multivariate Approach

Abstract

The connection among object oriented metrics and software maintenance effort is complex and non-linear. Therefore, there is wide research area in development and application of sophisticated techniques which can be used to construct models for predicting software maintenance effort. The aim of this paper is to evaluate Support Vector Machine for Regression in software maintainability prediction using object-oriented metrics to construct models for prediction of Software Maintenance Effort. Support Vector Machine has already proved its importance in Banking Sector and in other areas also. I am using SVR with Radial kernel function. It is observed that Support Vector Machine can be used for constructing accurate models for prediction of software maintenance effort which gives most accurate models for prediction. We are using maintenance effort data of two commercial software products QUES (Quality Evaluation System) and UIMS (User Interface System) Data is used in this study. The dependent variable in our study is maintenance effort. The independent variables are eight Object Oriented metrics. I will verify the dataset by Multivariate performance basis.

References

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