Abstract

A large number of metrics have been proposed for measuring quality of object-oriented software from its code. These include size, inheritance, cohesion and coupling, abstraction, hierarchies, encapsulation, composition, polymorphism, messaging etc. These object-oriented metrics affect the design quality of object oriented software as they are related with the design attributes like Reusability, Functionality, Effectiveness and Extendibility. In this paper, a fuzzy logic based model have been proposed that analyses object oriented metrics for one of the important attributes i. e. Extendibility. The model can be used to validate the precise role of design quality metrics in Extendibility of a software design. On the basis of results obtained, it has been concluded that the design quality of Object Oriented Software can be best assessed by fuzzy analysis of design quality metrics.
Validating Extendibility of the Object-Oriented Software using Fuzzy Computing Techniques

- MATLAB tutorial on Fuzzy Logic

Index Terms

Computer Science

Software Engineering

Keywords

Design Quality Product Quality Design Quality Metrics Design Properties
Design Quality Attributes
Fuzzy Computing