The Role of Key Elements in Software Development using Cluster Analysis

Abstract

The reliability is one very important parameter of applications software. The most straight restriction in most software reliability models is the assumption of statistical independence among successive software factors considered. Any measurement requires the set of elements associated with the associated process. Here the seven factors considered are size, effort, duration, S1 (customer participation), S2 (staff availability), S3 (standards use) and S4 (methods use). Here the paper discusses Qualitative/quantitative measurement of software using cluster analysis. In this paper four different cases are carried out. First analysis with size as predominant factor, second analysis with effort as predominant factor, third analysis with duration as predominant factor, finally including all the three associated in the list of seven factors with software reliability performance.

Reference

[8] Luigi Cerulo, Raffaelo Esposito, Maria Tortorella, Luigi Troiano RCOST –Research Centre on Software Technology Italy Supporting software Evolution by using Fuzzy logic 7th International IEEE workshop proceedings on Principles of software Evolution (IWPSE’04).

**Index Terms**

Computer Science Software Engineering

**Key words**

Software reliability cluster fuzzy logic