Abstract

Software reuse is helps to maintain the software and reduce much time in delivering, and cost and also improve quality. Most organization is considering software reuse is the crucial task and lot of algorithm is used for maintaining the software. The efficient management of monitoring data is essential for many software industries. The evolutionary test generation’s development in the recent years helps to test most of Object Oriented Program (OOP). In this method, Cuckoo Search Back Propagation Neural Network (CSBP) facilitates Class Responsibility Assignment in the software. The Cinema Booking System (CBS) is used to evaluate the function of the proposed system and existing system. Cuckoo Search (CS) algorithm find best solution for the class arrangement and Back Propagation Neural Network (BPNN) analyze best solution in backward direction. The proposed method gives better result than the existing technique used in the OOP for software reuse. The parameters evaluated from the techniques are Cohesion, Complexity, Cost function and Coupling. The cohesion value is the measure of element in the software belongs together and value of cohesion in proposed method is achieved up to 0.5862.
References


Transactions on Software Engineering, 36(6), pp. 817-837.


**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**

Cinema Booking System, Cohesion, Coupling, Cuckoo Search Back Propagation Neural Network, Object Oriented Program.