Abstract

The Software Cost Estimation (SCE) is one of the most important stages of the production cycle of a system. Therefore, the managers need to accurately determine the requirements of the project to have accurate estimations. But given the fact that the SCE is done at the beginning of the system development, it can be problematic due to lack of accurate information about the project. To solve this problem, researchers have proposed several methods to estimate the cost of software projects but haven’t been successful in estimating the costs with 100% accuracy. In this paper, we intend to improve the accuracy of the cost estimation by using Bee Colony Optimization algorithm. It should be mentioned that the proposed method is compared with the intermediate COCOMO. The results indicate that the proposed method have reduced the mean absolute relative error to 0.1619.
- M. Nikolic, D. Teodorovic, "Empirical study of the Bee Colony Optimization (BCO)

**Index Terms**

Computer Science  
Algorithms

**Keywords**

Software Cost Estimation  
bee colony optimization algorithm  
intermediate COCOMO.