Abstract

Software cost estimation is one of the most challenging tasks in software engineering. Over the past years the estimators have used parametric cost estimation models to establish software cost, however the challenges to accurate cost estimation keep evolving with the advancing technology. A detailed review of various cost estimation methods developed so far is presented in this paper. Planned effort and actual effort has been comparison in detail through applying on NASA projects. This paper uses Back-Propagation neural networks for software cost estimation. A model based on Neural Network has been proposed that takes KLOC of the project as input, uses COCOMO model parameters and gives effort as output. Artificial Neural Network represents a complex set of relationship between the effort and the cost drivers and is a potential tool for estimation. The proposed model automates the software cost estimation task and helps project manager to provide fast and realistic estimate for the project effort and development time that in turn gives software cost.

References

- Neha Sharma, Amit Sinhal, Bhupendra Verma, "Software Assessment Parameter
Automation of Software Cost Estimation using Neural Network Technique

- MatLab R2010 Neural Network Tool Box Product Help
Automation of Software Cost Estimation using Neural Network Technique

- J. E. Matson, B. E. Barrett, J. M. Mellichamp, "Software development cost

**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**

Back Propagation Neural Network  
COCOMO Model  
Software Cost Estimation.