Abstract

The software cost estimation is now one of centre of attention for computer software industries. As software industry runs many projects simultaneously they have to prioritize different processes based on time, cost, and number of staff, sequentially. With the increasing complexity of software, the cost of the software development is also increasing. So it is required to rely on the effective techniques for estimating software costs. Accurate cost estimation is needed because it can help to prioritize and classify development projects. In this paper, the most popular software cost estimation model, COCOMO II (post architecture model of COCOMO), is discussed. The estimation of COCOMO II is enhanced through neural network. The network is trained through perceptron learning rule. The company’s previous projects dataset of estimation and actual cost can be used to train the network. The cost estimation result of COCOMO II is compared with trained network.

References

Proposing Effort Estimation of COCOMO II through Perceptron Learning Rule

- Bradford Clark, Sunita Devnani-Chulani, Barry Boehm., "Calibrating the COCOMO II Post-Architecture Model;&quot;
- www.msu.edu/course/lin/463/ss04/learning.pdf
- Jorgerson, M., "Experience with accuracy of software maintenance task effort prediction models," IEEE Transactions on Software Engineering, Volume 21 (8), 674–681,
1995.

Index Terms
  Computer Science  Neural Networks

Keywords
  Software cost estimation  neural network  COCOMO II  perceptron learning