A Novel Evolutionary Approach to Software Cost Estimation

Human Opinion Dynamics is a novel approach to solve complex optimization problems. This paper proposes and implements Human Opinion Dynamics for tuning the parameters of COCOMO model for Software Cost Estimation. The input is coding size or lines of code and the output is effort in Person-Months. Mean Absolute Relative Error and Prediction are the two objectives considered for the fine tuning of parameters. The dataset considered is COCOMO. The current paper demonstrates that use of human opinion dynamics illustrated promising results. It has been observed that when compared with standard COCOMO it gives better results.

References


Index Terms

Computer Science

Software Engineering

Keywords

Human Opinion Dynamics, COCOMO, MARE, Social influence, Update Rule