Belief-Rule-based Decision Support System for Evaluating of Job Offers

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 129

Number 6

Year of Publication: 2015

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10.5120/ijca2015906941

Abstract

The word ‘Job’ term as a regular activity performed in exchange for payment is considered as one of the most important activities for many families worldwide. Evaluation is necessary when more than one opportunity come to an individual personality. Then it requires the job offer evaluation. To fulfill their desired goal, it is the evaluation which assesses them well. This involves many factors to be measured and evaluated. These factors are expressed both in objective and subjective ways where as a hierarchical relationship exists among the factors. In addition, it is difficult to measure qualitative factors in a quantitative way, resulting incompleteness in data and hence, uncertainty. Besides it is essential to address the subject of uncertainty by using apt methodology; otherwise, the decision to choose a job will become inapt. Therefore, this paper demonstrates the application of a novel method named belief rule-based inference methodology-RIMER base decision support system(DSS), which is capable of addressing suitable job by taking account of large number of criteria, where there exist factors of both subjective and objective nature.
References


10. Kari Sentz and Scott Ferson (2002); Combination of Evidence in Dempster–Shafer Theory, Sandia National Laboratories SAND 2002-0835


**Index Terms**

Computer Science

Information Sciences

**Keywords**

Multiple criteria decision analysis (MCDA), uncertainty, belief rule base (BRB), evidential reasoning (ER), and decision support system (DSS).