Abstract

This paper presents an interval valued goal programming approach for solving multiobjective fractional programming problems. In the model formulation of the problem, the interval-valued system constraints are converted into equivalent crisp system. The interval valued fractional objective goals are transformed into linear goals by employing the iterative parametric method which is an extension of Dinkelbach approach. In the solution process, the goal achievement function, termed as "regret function", is formulated for minimizing the unwanted deviational variables to achieve the goals in their specified ranges and thereby arriving at most satisfactory solution in the decision making environment. To illustrate the proposed approach one numerical example is solved.
Dinkelbach Approach for Solving Interval-valued Multiobjective Fractional Programming Problems using Goal Programming

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**Index Terms**

Computer Science
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**Keywords**

Dinkelbach approach  Fractional Programming  Goal Programming  Interval Arithmetic
Interval Programming