

A Necessity Measure Optimization Approach to Linear Programming Problems with Oblique Fuzzy Vectors

Masahiro Inuiguchi

Abstract: In this paper, a necessity measure optimization model of linear programming problems with fuzzy oblique vectors is discussed. It is shown that the problems are reduced to linear fractional programming problems. Utilizing a special structure of the reduced problem, we propose a solution algorithm based on Bender's decomposition. A numerical example is given.

Keywords: fuzzy linear programming; oblique fuzzy vector; necessity measure; Bender's decomposition;

AMS Subject Classification: 90C70; 90C05; 49M27;