

An Interactive Face Search Procedure For Multiple Objective Linear Programming

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Abstract

This paper presents a new interactive procedure for multiple objective linear programming problem (MOLP). In practical multiple objective linear programming applications, there is usually no need for the decision maker to consider solutions which are not efficient. Therefore, the interactive procedure presented here searches only among efficient solutions and terminates with a solution that is guaranteed to be efficient. It also can converge to nonextreme efficient final solutions rather than being restricted to only extreme efficient points of the feasible set. The procedure allows the decision maker to examine the efficient faces that it finds and does not require sophisticated judgments or inputs from the decision maker.