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A Fuzzy Programming Approach for Solving Intuitionistic Fuzzy Linear Fractional Programming Problem

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Abstract : This paper develops an approach for solving intuitionistic fuzzy linear fractional programming (IFLFP) problem where the cost of the objective function, the resources, and the technological coefficients are triangular intuitionistic fuzzy numbers. Here, the IFLFP problem is transformed into an equivalent crisp multi-objective linear fractional programming (MOLFP) problem. By using fuzzy mathematical programming approach the transformed MOLFP problem is reduced into a single objective linear programming (LP) problem. The proposed procedure is illustrated through a numerical example.

Keywords : triangular intuitionistic fuzzy number, linear programming problem, multi objective linear programming problem, fuzzy mathematical programming, membership function
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