

A Genetic Algorithm Approach for Multi Constraint Team Orienteering Problem with Time Windows

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Abstract : The Orienteering Problem is the most known example to start modeling tourist trip design problem. In order to meet tourist's interest and constraint the OP is becoming more and more complicate to solve. The Multi Constraint Team Orienteering Problem with Time Windows is the last extension of the OP which differentiates from other extensions by including more extra associated constraints. The goal of the MCTOPTW is maximizing tourist's satisfaction score in same time not to violate any of these constraints. This paper presents a genetic algorithmic approach to tackle the MCTOPTW. The benchmark data from literature is tested by our algorithm and the performance results are compared.

Keywords : multi constraint team orienteering problem with time windows, genetic algorithm, tour planning system

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