The optimum genetic operators’ selection method in genetic algorithm for the space allocation problem

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Abstract: The space allocation problem particularly in academic institutions is well known as a complex, difficult and time consuming task. This paper investigates the optimum genetic operators’ selection method in genetic algorithm in handling combinatorial optimisation problems. The discussed space allocation problem focuses on the distribution of timetable among available lecture halls and rooms in the university. We investigate the optimum selection method to select parents during the reproduction and crossover genetic operations. The investigated selection methods are random, deterministic and roulette wheel selection.

Keywords: space allocation; genetic algorithm; combinatorial optimisation; optimum genetic operator; selection method; random; deterministic; roulette wheel.