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Title: Development of maze puzzle algorithm for the job shop scheduling

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Abstract: Maze puzzle concept has been introduced for solving job shop scheduling problem. Maze puzzle algorithm (MPA) is based on rotation and random jumping which explores the solution space as well as exploits the solution near to optimum. Coding is done using MATLAB software, and benchmark problem is evaluated for assessing efficiency of the algorithm. The algorithm can be used for optimisation of makespan for the given problem. The results are compared with other methods like GA, SA, SBI, SBII, PSO, BBO and TS, and found better than GA, SA, SBI, PSO, BBO but poor than SB-2 and TS.

Keywords: maze puzzle; optimisation; job shop scheduling; makespan; MATLAB; jumping; rotation.

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