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**Optimisation of makespan of a flow shop problem using multi layer neural network.** (English)

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Summary: This paper presents an approach based on a multi layer neural network algorithm (MLNNA) to find a sequence of jobs for flow shop scheduling problems with the objective of minimise the makespan. The purpose of this paper is to develop an artificial intelligence and trained a neural network model for solving the flow shop scheduling problem which gives a best jobs sequence with the objective of minimise the makespan. The effectiveness of the proposed MLNNA method is compared with many problems selected from different papers. A large number of problems are solved with the present MLNNA model and it is found suitable and workable in all the cases.

**MSC:**

**90B35** Deterministic scheduling theory in operations research

**68T07** Artificial neural networks and deep learning

**Keywords:**

artificial neural network; flow shop problem; scheduling; multi-layer network; makespan; job sequencing

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