

The Design of An Intelligent Job Scheduler

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Abstract

This paper presents a prototype design for a job scheduling expert system. The system, called IS, contain two significant features : (1) the ability of taking actionx according to changing environment and (2) a hierarchical decision framework embedded in the system.The first feature makes IS able to handle the dynamic situatios in job shop environment. And the latter makes the decision-making process of the system similar to the human being. the system was develoed and tested in an experimental job shop environment. Its performance seems quite attractive compared to that of traditional approach in whitch a schedule is constructed by dispatching job using SPt, COVERT, and SLK/OPNpriority rules.

Keywords: Job shop scheduling,Expert system, Atificial intelligence.