

عنوان مقاله:

Multi-agent Formula for automated guided vehicles Systems

محل انتشار:

فصلنامه تحقیقات کاربردی در مهندسی صنایع، دوره 1، شماره 5 (سال: 1393)

تعداد صفحات اصل مقاله: 13

نویسندگان:

H. Haleh - *Golpayegan University of Technology, Department of Industrial Engineering, Golpayegan, Iran*

Mohamad Tayebi Araghi - *Department of Industrial Engineering, Tehran Science and Research Branch, Azad Islamic University, Iran*

S. Mohammad Arabzad - *Department of Industrial Engineering, Science and Research Branch, Islamic Azad University, Tehran, Iran*

خلاصه مقاله:

Automated guided vehicle system (AGVS) is traditionally used in manufacturing and warehousing. Especially, AGVS has many applications in flexible manufacturing system (FMS) (see, e.g., Ganesharajah, Hall, & Sriskandarajah, ۱۹۹۸; Seo & Egbelu, ۱۹۹۹; Vosniakos & Mamalis, (۱۹۹۰). Agents are event-driven objects that can integrant in automated manufacturing environments to control certain tasks. In this paper a set of agents (a multi-agent system) is introduced to control an automated manufacturing environment. The studied problem can be modeled as a job shop where the jobs have to transported between machines by AGVs. This article introduces based on a disjunctive graph to modulate the joint scheduling problem and for machines and AGVs scheduling. The objective is to minimize the make span.

Some case studies were used to show the effectiveness of simulation in solving these problems

کلمات کلیدی:

Flexible manufacturing systems, Simulation, Problems in various stages, Scheduling Problems

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1360124>

