

## The Design of Intelligent Passenger Organization System for Metro Stations Based on Anylogic

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**Abstract :** Passenger organization has always been an essential part of China's metro operation and management. Facing the massive passenger flow, stations need to improve their intelligence and automation degree by an appropriate integrated system. Based on the existing integrated supervisory control system (ISCS) and simulation software (Anylogic), this paper designs an intelligent passenger organization system (IPOS) for metro stations. Its primary function includes passenger information acquisition, data processing and computing, visualization management, decision recommendations, and decision response based on interlocking equipment. For this purpose, the logical structure and intelligent algorithms employed are particularly devised. Besides, the structure diagram of information acquisition and application module, the application of Anylogic, the case library's function process are all given by this research. Based on the secondary development of Anylogic and existing technologies like video recognition, the IPOS is supposed to improve the response speed and address capacity in the face of emergent passenger flow of metro stations.

**Keywords :** anylogic software, decision-making support system, intellectualization, ISCS, passenger organization

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