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DCS System for Elevator

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Abstract: *The modernization of vertical transportation systems has become a crucial facet of building infrastructure, necessitating sophisticated control mechanisms to enhance efficiency, safety, and user experience. This abstract introduces a Distributed Control System (DCS) designed for elevators, leveraging advanced technologies to optimize operations and address the evolving demands of contemporary urban landscapes.*

The DCS for elevators integrates intelligent control algorithms, real-time monitoring, and predictive maintenance strategies to revolutionize the traditional elevator management paradigm. User inputs, including destination floors and call directions, are analyzer to dynamically assign elevators based on factors such as proximity, current load, and traffic patterns. This ensures optimal elevator utilization and reduces passenger wait times. Real-time monitoring capabilities empower the system to adjust dynamically to changing demands, offering a seamless and responsive experience. The DCS incorporates safety features such as emergency handling for fire alarms, power failures, and other contingencies, ensuring passenger security is paramount.

Keywords: elevator, DCS, Smartphone, Personalization, wifi module

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