

Research on mathematical models for organizing smart parking lots based on IoT technology and parking lot traffic load distribution algorithms

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Abstract: This topic aims to research and deploy mathematical models for an intelligent parking lot system based on Internet of Things (IoT) technology to optimize vehicle flow management. The context of the topic stems from the need to improve the efficiency of parking space utilization, reduce traffic congestion, and enhance user experience. The objective of the research is to build a parking lot traffic load distribution system based on optimization algorithms. The approach combines theory with experimentation to ensure the feasibility and performance of the topic. Expected results from the topic include identifying suitable mathematical models, contributing to the improvement of intelligent parking lot management technology.

Keywords: Smart parking, IoT, load balancing algorithm