

Applying YOLO model and OCR techniques in smart parking management

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Abstract: In the context of information technology development, the issue of parking lot management has become an important factor in improving the efficiency of urban space utilization. This topic focuses on applying the YOLO (You Only Look Once) model and OCR (Optical Character Recognition) technique to develop a smart parking management system. The objective of the research is to build an automatic system for license plate recognition and vehicle positioning in the parking lot to optimize the process of finding parking spaces and making payments. The research method combines theory with experimentation to ensure the accuracy and performance of the system. The expected result is to provide a useful solution for the transportation industry and improve the quality of life for urban residents.

Keywords: YOLO, OCR, parking lot management, information technology, license plate recognition