

Research on the application of deep learning in license plate detection and recognition

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Abstract: This topic aims to examine issues related to the application of deep learning for license plate detection and recognition. The context of the topic is based on the fact that automating the process of traffic monitoring, management, and control is becoming increasingly urgent in the information technology era. The objective of the research is to build a deep learning-based system capable of accurately recognizing license plates from images with high precision. The proposed method includes theoretical and experimental analysis of modern deep learning models, as well as deploying the application in a real-world environment. Through this, the topic is expected to make a significant contribution to the development of information technology in the field of transportation, while addressing practical issues of traffic security and management.

Keywords: Deep learning, License plate detection, License plate recognition, Information technology, Transportation