

Research and application of the ResNet model in traffic sign recognition to support intelligent transportation

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Abstract: In the context of information technology development, researching and applying the ResNet model to the field of traffic sign recognition plays an important role in improving traffic management efficiency. This project aims to build an automatic, accurate, and fast recognition system for various types of traffic signs. Through a combination of theoretical research and experimentation, the project proposes a method based on an improved ResNet model to effectively handle issues of image noise and the diversity of sign samples. The expected results of the project not only help improve the quality of traffic services but also contribute to the development of intelligent transportation systems.

Keywords: ResNet, traffic sign recognition, intelligent transportation