Abstract   
  
With the popularization of automobile and the progress of computer vision detection technology, intelligent license plate detection technology has gradually become an important part of intelligent traffic management.

License plate detection is used to segment vehicle image and obtain license plate area for follow-up recognition system to screen. It is widely used in intelligent traffic management, vehicle video monitoring and other fields. In this paper, two license plate detection methods are studied, one is based on Sobel edge detection and the other is based on morphological gradient detection. Basing on OpenCV , visual studio 2012 under Windows system(Alternative interpreter) and Google Colab , one method of license plate detection is implemented, and the two algorithms are compared in detail from the aspects of license plate detection accuracy so , we chose to work with OpenCV particularly. This methods has a high efficiency and good interactivity, which provide a reference for later license plate recognition.