

## A Grid-Computing Based Multi-Camera Tracking System for Vehicle Plate Recognition

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*Abstract:* There are several ways that can be implemented in a vehicle tracking system such as recognizing a vehicle color, a shape or a vehicle plate itself. In this paper, we will concentrate ourselves on recognizing a vehicle on a highway through vehicle plate recognition. Generally, recognizing a vehicle plate for a toll-gate system or parking system is easier than recognizing a car plate for the highway system. There are many cameras installed on the highway to capture images and every camera has different angles of images. As a result, the images are captured under varied imaging conditions and not focusing on the vehicle itself. Therefore, we need a system that is able to recognize the object first. However, such a system consumes a large amount of time to complete the whole process. To overcome this drawback, we installed this process with grid computing as a solution. At the end of this paper, we will discuss our obtained result from an experiment.

*Keywords:* vehicle plate recognition; grid computing; recognition system; tracking system;

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