

## **Detection of Slow-Speed-Notifying Signal from Front View of Train**

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A slow-speed-notifying signal is a quite important component of railway signal system that is related with the train's safety. However, because detection of the slow-speed-notifying signal is depending on only the driver's eyes, and further a backup system such as ATS is not installed, the security of the train's safety is not complete. Therefore, in order to solve this problem, we have been developing a system based on image processing method, which uses pattern-matching algorithm. This system is able to detect slow-speed-notifying signals automatically from image sequences of front view of train, and gives an alarm to the drivers to assist them. In this paper, we describe the details of these fundamental algorithms and the results of prototype program's benchmark tests.