

identiCAR

Traffic control and automatic license plate recognition

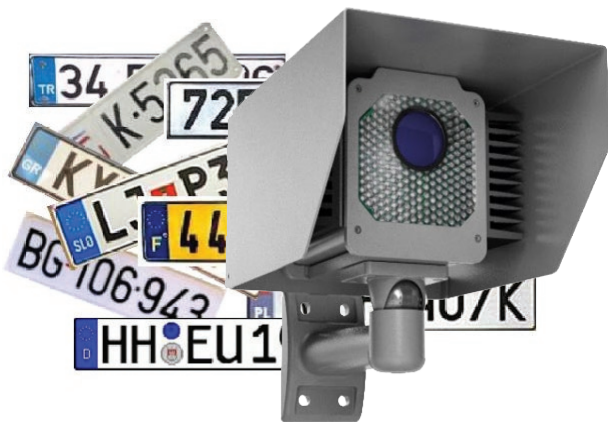
Introduction

Automatic license plate recognition system is a result of many years of experience in digital image processing. An ideal combination of engineering experience and modern technology, which brings cameras with new possibilities, has enabled innovative solutions in area of traffic management systems.

System description

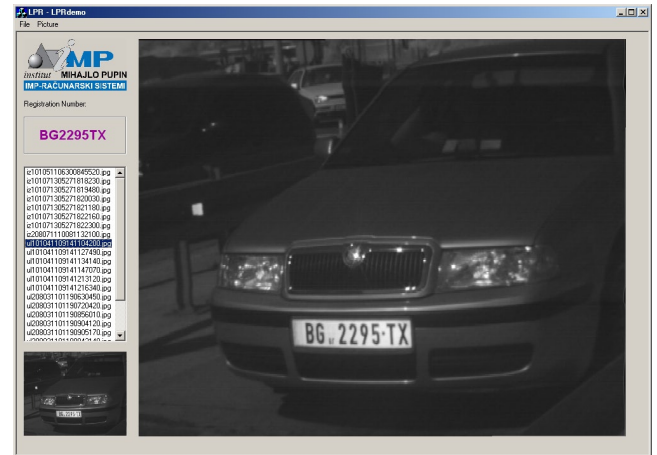
Each LPR system consists of a specialised camera equipped with IR illuminator and coupled with a personal computer running the license plate recognition software. New generation video cameras enable high quality image capture, as well as new ways of image transfer to the computer. For that purpose, fast Ethernet links are used, including wireless.

Vehicle images captured by dedicated cameras are collected by the computer which through image analysis extracts the license plate images that are later used for Optical Character Recognition (OCR) process. All gathered (recognised) data such as raw pictures and license plate numbers are stored in a managed database.



Trends

In certain specialised cases, the usage of "smart" cameras (with integrated image processing capabilities) or standard IP cameras coupled with rugged outdoor PC has been very popular. In both cases, image processing is decentralised and only data of interest are stored in the central computer. This approach greatly reduces the usage of communication means and server's resources.



Usage

Nowadays, smart and IP cameras, together with the license plate recognition software, have multiple usages in modern traffic management systems, such as:

- Recording the passage of a vehicle through a certain point, congestion charging, border control, etc.;
- Access control (public parking, garages, automated warehousing), manned or unmanned;
- Road toll charging;
- Traffic red light violation, with or without Optical Character Recognition;
- Vehicle sector speed measurement;
- Searching for black listed or wanted by police vehicles (through license plate OCR);
- Dedicated traffic lane (Bus lane) enforcement;
- Traffic counters.

References

IMP Computer Systems is a company dealing with traffic systems integration through usage of our own software solutions and equipment produced by well known producers.

Our license plate recognition software has been installed on all road toll lanes in Serbia and Bosnia & Herzegovina.

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