

LEGAL ASPECTS OF DATA MINING ALGORITHMS FOR STREAM PROCESSING IN TRAFFIC SURVEILLANCE

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Summary: A major challenge that all law-enforcement and intelligence-gathering organizations are facing is to accurately and efficiently analyze the growing volumes of crime data. In many fields, video surveillance can be used for that purpose. Video surveillance systems are now commonly used at various places like banks, hotels, schools, supermarkets. These systems are applicable for real-time monitoring or post checking. Current video surveillance systems have lower intelligence and it need people to monitor them. Today, video surveillance systems are used for traffic cameras, too. Traffic cameras are an innovative and extremely functional application of video surveillance technology. Whether they are recording traffic patterns for the future study and observation or monitoring traffic and issuing tickets for moving violations, traffic cameras are an explosively popular form of video surveillance. One way to find traffic patterns or to prevent traffic accidents and provide better road security is to use data mining techniques. With data mining, stream from many traffic cameras can be processed in real time. Property like this could provide some intelligence upgrade within systems, so they could make decision on their own without the need of people to monitor them. In this paper the authors described the data mining techniques for stream processing, pattern and abnormality detection in traffic surveillance systems. Each video recording and the use of recorded video on the court must be covered by legal regulations. The authors investigated and extracted the appropriate articles from concrete Laws of Republic Serbia, covering this kind of problems.

Keywords: Clustering, Data Mining, Stream Processing, Traffic Surveillance, Law Regulation, Jurisprudence.

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