Adaptive Background Extraction for Real-time Traffic Monitoring

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The automatic quantitative and qualitative analysis of traffic systems have an important role in control traffic movement. Computer vision based systems, using image processing algorithms, can extract moving objects from background in each moment and this is very useful for gathering traffic information. In these systems, adaptive background image that is updated according to each status can be used to extract other information. This paper describes a system that can be used to extract adaptive background from a sequence of traffic images. This system is based on genetic algorithm for setting up combination parameter used for background extraction. This project is completely implemented. It has facility to receive images from up reared analog cameras in streets, auto bans and conjunctions all around the Tehran.