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Statistical Model For Pseudo-Moving Objects Recognition In Video Surveillance Systems

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Keywords: Outlier Objects, Pseudomoving Objects, Statistical Criteria, Bayesian Integration, Logistic Regression

Abstract. This paper considers a statistical approach to define pseudo-moving (false) objects in video surveillance systems by constructing systems of hypothesis with the criteria based on statistical behavioral particularities. The obtained results are integrated in two ways: using the Bayes' theorem or the logistic regression. FAR-FRR curves are plotted for each system of hypothesis and also for the decision rule. The results of the proposed methods are obtained on test video databases.

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