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# Capture and tracking of remote objects in video stream

© A.N. Alfimtsev, N.A. Demin

Bauman Moscow State Technical University, Moscow, 105005, Russia

*Several algorithms of remote objects capture and tracking in a video stream, such as Lucas – Kanade, Motion Templates, Mean-Shift, CamShift, Viola – Jones were considered. A comparative analysis of algorithms, identified their strengths and weaknesses was conducted. The efficiency of each algorithm applied to the problem tracking remote object presents the results of their work were presented. By analyzing the probability of error types I and II with each of the discussed algorithms and their characteristics in the processing stream, two of the most suitable algorithm for capture and tracking were allocated. We propose an integrated algorithm that uses the capabilities of the algorithm Lucas – Kanade and the algorithm based on Haar cascades to capture and tracking the remote object.*

**Keywords:** *object capture, object tracking, video stream, image processing, pattern recognition.*

**Alfimtsev A.N.** graduated from Bauman Moscow State Technical University in 2005. Ph.D., Assoc. Professor of the Information Systems and Telecommunications Department of Bauman University. Author of 70 scientific publications, including five patents for inventions. Scientific interests lie in the fields of artificial intelligence methods, multi-modal interfaces and pattern recognition. e-mail: [alfim@bmstu.ru](mailto:alfim@bmstu.ru)

**Demin N.A.**, student of the Information Systems and Telecommunications Department of Bauman Moscow State Technical University. Author of two scientific publications. Research interests: pattern recognition, network interfaces, digital image processing. e-mail: [dyominick@gmail.com](mailto:dyominick@gmail.com)

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