

MSEE Scholarly Paper Presentation

Motion Detection in Video using the Snakes Algorithm

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Abstract

In this day and age, video cameras are omnipresent. They watch us at the airport, the ATM, and many other places. However, it is getting to the point where there are too many video cameras and not enough people to watch them. How do you monitor all of these video cameras? The solution can be found with modern video processing algorithms. We can process the video electronically, detect motion and alert the proper personnel. This paper will discuss the common tools used in video processing as well as the Snakes algorithm, which can be used to detect motion in video sequences. This algorithm has the benefit of providing a general outline of the object in motion, which can then be compared to a database of templates to help identify the moving objects in the video sequence.