Abstract

This work falls within the framework of the video surveillance research axis. It involves a link between automatic processing and problems related to video surveillance. The job is to analyze video streams coming from a network of surveillance cameras, deployed in an area of interest in order to detect abnormal behavior. Our approach in this paper is based on the new application and the use of fuzzy logic with an aim of avoided the modeling of abnormal crowd behavior. By introducing the notion of degree in the verification of a condition, thus allowing a condition to be in another state rather than true or false, fuzzy logic confers a very appreciable flexibility on the reasoning that uses it, taking into account inaccuracies and uncertainties. One of the work interests performed in formalized human reasoning is that the rules are spelled out in a natural language. Detecting these behaviors will increase the response speed of security services to perform accurate analysis and detection of abnormal events. We then present a comparative table followed by a study on the effects of using another technique. Despite the complexity of the sequences, our approach provides highly relevant results including in the detection areas of several crowd behaviors.