IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 1, November 2022
Impact Factor: 6.252

Deep Learning Approach for Suspicious Activity Detection from Surveillance Video

Gaurav Borse[1], Shubham Tanpure[2], Rohit Dolas[3], Sanket Chavan[4], Prof. S. M. Patil[5]
UG Students, Department of Computer Science [1,2,3,4]
Professor, Department of Computer Science[5]
SKN Sinhgad Institute of Technology & Science, Lonavala, Maharashtra, India

Abstract: *In today's uncertain world, video surveillance plays a vital role in maintaining indoor and outdoor security. Video surveillance system components such as behavior detection, behavior understanding, and normal or suspicious activity classification can be used for real-time applications. This article uses a hierarchical approach to detect various suspicious activities such as loitering, fainting, and trespassing. This approach is based on motion properties between different objects. First, various suspicious activities are defined using a semantic approach. Object detection is then performed by background subtraction. Detected objects are classified as live (human) or non-live (bag). These objects need to be tracked and this is done using correlation techniques. Finally, motion features and temporal information are used to classify events as normal or suspicious. A semantics-based approach is used, resulting in low computational complexity and high efficiency of the approach.*

Keywords: Video Surveillance; Suspicious Activities; Motion Features; Semantic Approach; Object Detection

REFERENCES

[1]. S. Zaidi, B. Jagadeesh, K. V. Sudheesh and A. A. Audre, "Video Anomaly Detection and Classification for Human Activity Recognition," 2017 International Conference on Current Trends in Computer, Electrical, Electronics and Communication (CTCEEC), Mysore, 2017, pp. 544-548.

[2]. M. Saab and J. Gotman, "A system to detect the onset of epileptic seizures in scalp EEG," Clinical Neurophysiology, vol. 116, no. 2, pp. 427–442,2005.

[3]. Sandesh Patil and Kiran Talele "Suspicious Movement Detection and Tracking based on Color Histogram", 2015 International Conference Communication, Information & Computing Technology (ICCICT), Jan. 16-17