

(54) Title of the invention : YOLO R-CNN Method with Real Time Kaggle Dataset for Weapon Detection

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(57) Abstract :
 The Recurrent Convolutional Neural Networks (RCNN) based deep learning models has been classified image patterns and deep features through layer architecture. Nowadays, no country is encouraging violence, so that indirectly nations prohibiting usages of weapons to common people. This work proposes a novel YoLo Faster R-CNN based weapon detection method for unusual weapon object detection. The proposed YoLo V3 R-CNN computer vision application can rapidly find weapons carried by people and highlighted through bounding-box-intimation. The work plan has been divided into two stages, at first stage pre-processing has been called to Faster R-CNN segmentation. The second stage has been training the dataset as well as extracting eight-features (image_id, detection score, pixels-intensity, resolution, Aspect-ratio, PSNR, CC, SSIM) into .csv file. The labeling can be performed to RCNN-YoLo method such that getting real-time objects detection (Unusual things). The Confusion matrix has been generating performance measures in terms of accuracy 97.12%, SSIM 0.99, sensitivity 97.23%, and throughput 94.23% had been attained which are outperformance methodology.

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