CHAPTER 9
CONCLUSIONS AND FUTURE SCOPE OF THE WORK

9.1 CONCLUSIONS

This thesis has considered human recognition in video, using gait. The conclusions of this research work are as follows;

1. The statistical features are extracted from the image. These features are optimum representation of the objects in the image.
2. Contextual clustering method has been used to obtain statistical features. These features are used to segments the image.
3. Coordinates of centroid of bounding boxes are obtained using imfeatures for different persons in the frames.
4. HMM+RBF is used for identifying persons different walking styles using gait.
5. HMM+CPN is used for identifying persons different walking styles using gait.
6. The person walking styles identification performance of HMM+CPN is better than that of HMM+RBF.
7. By using the proposed methods in this thesis, the brisk walking, stealthy walking and stumbled walking were identified.

9.2 FUTURE ENHANCEMENTS

In spite of sophisticated algorithms developed over a period of time, still lot of research is required to identify and track persons through video using gait and additional features. Many intelligent methods can be applied for segmentation and person identification,
using gait. From the literature, it can be noted that, all experiments of gait analysis were confined to laboratory. The gait analysis should be worked on real time video in a crowded environment. There are surveillance camera fixed in the busy streets of important city. These cameras help the crime detectors to identify persons (carrying luggage) unusually. This is correlated with the event like bomb blast or unethical behavior of the person in the video. Hence, the future work should somehow correlate the person with unusual walk in the video and the incidents happened.