Abstract

With the increase in industrial production and human activities, the concentration of atmospheric particulate matter (PM) is substantially increased; due to which fog and haze occur more frequently. Limited visibility is caused by suspended particles in the air, such as fog and haze are a major problem for many applications of computer vision. The captured scenes by such computer vision systems suffer from poor visibility, low contrast, dimmed brightness, low luminance and distorted color. The detection of objects within the scene is more difficult. Therefore visibility improvement, contrast and features enhancement of images and videos captured in bad weather are also called as dehazing, is an inevitable task.

The Motion detection is the first essential process within the extraction of data concerning moving objects and makes use of stabilization in purposeful areas, like tracking, classification, recognition, and so on. A total unique and accurate approach to motion detection for the automated video surveillance system has been adopted. Complete detection of moving objects can be achieved by involving three significant projected units, a background modeling (BM) unit,
an alarm trigger (AT) unit and an object extraction (OE) module. Intelligent service mechanism development is a crucial and critical issue for human community applications. With the diverse and complicated service desires, the perception and navigation are essential subjects. First of all, a new augmented approach of graph-based optimum estimation derived for concurrent mechanism postures and affecting objective course approximation. Moreover, all the moving object detection issues of a robot’s indoor navigation has been solved by divided and conquered via multisensory fusion methodologies.

References

14. X. Zhang, W. Hu, S. Chen, and S. Maybank, “Graph-embedding-based learning for

Index Terms

Computer Science Pattern Recognition

Keywords

Retinex theory, Visibility restoration, dehazing, Edge-preserving regularization, Fusion technique.