Abstract

Security and safety of the people in public places is the major concern for the law enforcement departments of this country. Building surveillance system with video tracking and robotic platforms is the current challenge for the engineers to build indigenous Security Systems. The majority of existing systems are stationary with roof mounted video cameras for object tracking which do not provide full proof security. In this paper, a prototype of semi-automated robotic system for surveillance, object tracking and retrieval in real time environment is discussed. Surveillance is accomplished by video camera, object detection and tracking is achieved by image processing techniques and a robotic system with an arm. The retrieved object is disposed in a pre designated location. The obstacle detection and avoidance is adopted in this robotic surveillance system [1]. Security and safety of the people in public places is the major concern for the law enforcement departments of this country. Building surveillance system with video tracking and robotic platforms is the current challenge for the engineers to build indigenous Security Systems. The majority of existing systems are stationary with roof mounted video cameras for object tracking which do not provide full proof security. In this paper, a prototype of semi-automated robotic system for surveillance, object tracking and retrieval in real time environment is discussed. Surveillance is accomplished by video camera, object detection and tracking is achieved by image processing techniques and a robotic system with an arm. The retrieved object is disposed in a pre designated location. The obstacle detection and avoidance is adopted in this robotic surveillance system [1].

References

- www2. engr. arizona. edu/~pgsangam/research.html
- Tracking red colour objects using Matlab
- Electronics For You Plus+, Monthly Issue January 2015
Mobile Surveillance System for Object Detection and Extraction using Image Processing

Research, Florida Conference on Recent Advances in Robotics, May 2006, Florida International University, USA
- MATLAB and Arduino GUI Interface
- https://www.youtube.com/watch?v=RAkw-lnaZR0.

**Index Terms**

Computer Science
Image Processing

**Keywords**

Surveillance Obstacle Avoidance Objects Detection Video Tracking Centroid
Bounding Box
Region Of Interest
Object Retrieval