IJARCCE

ISSN (Online) 2278-1021
ISSN (Print) 2319-5940

International Journal of Advanced Research in Computer and Communication Engineering
ISO 3297:2007 Certified
Vol. 7, Issue 3, March 2018

IR based Theatre Piracy Reduction by using Image Processing

Gouri Raut[1], Kajal Bakade[2] , Proff. S.V.Kulkarni[3]

BE, instrumentation, AISSMS Institute of Information Technology, Pune, India[1,2]

Professor, BE, Instrumentation, AISSMS Institute of Information Technology, Pune, India[3]

Abstract: The system locates the camera, and then neutralizes it. This paper intends to aid in maintaining the safety and security of people by developing an application with the help of which spy cameras can easily be detected, also the location and the perpetrator's identity would be sent to the concerned authorities. It finds its application in courts and places where cameras are not allowed. In this paper, we propose another system for recognizing and deactivating advanced cameras in photography restricted regions. This procedure will find a camera and afterward kill it. It utilizes picture handling for identifying camera's focal point. In the wake of finding camera's focal point an infrared light will be coordinated towards that focal point which will twist the picture by overexposure. The coordinated infrared light causes solid lessening in the nature of the picture. It doesn't meddle with camera's activity and it is innocuous to the camera client. The proposed work has applications, for example, averting theft at theatres. This work will serve advantageous at spots, for example, galleries, enterprises, recorded landmarks, shows, evolving rooms, shopping centres, gems stores where keeping up mystery is enormous issue.

Keywords: Image processing, Camera, IR transmitter.

I. INTRODUCTION

The issue of hidden cameras at open spots is extremely foremost nowadays. These cameras are covertly placed up in evolving rooms, theatres and numerous different spots which represent a noteworthy risk to the protection of individuals. Motion picture appears when they are discharged are recorded and set up for open utilize route before the real legitimate CDs are made accessible in the market prompting immense misfortunes for the genuine proprietors who don't get their offer of the advantage. This task means to help in keeping up the wellbeing and security of individuals by building up an application with the assistance of which spy cameras can undoubtedly be identified. Likewise this undertaking discovers its application in courts and places where cameras are not permitted. A few people may contend that cameras are anything but difficult to discover and this proposition is in this way pointless, however hunting down undercover cameras is no less demanding an occupation. Physically checking their quality is relatively inconceivable, this framework will discover its application at such places. Mobile phones with camera are exceptionally basic nowadays. While going by spots, for example, galleries, museums, sanctuaries, shows or places where keeping up mystery is a major issue, client conveys his advanced cell with him. Despite the fact that photography is disallowed in such territories, client tends to catch pictures of these destinations covertly, which isn't noteworthy. Thinking about the robbery at theatres, Indian film industry endures heavy losses because of it. To maintain a strategic distance from such issues, we have to build up a system which will identify such advanced mobile phone camera or any digital camera and after that destroy picture or video taken by that camera. In the meantime the system ought not to make any harm camera or the client. So system configuration goes for an appropriate method which won't meddle with camera's task alongside being innocuous for the client. System will just distinguish camera in photography restricted zone and afterward it will produce a solid infrared bar at every gadget to kill it from catching picture or video. As we are utilizing infrared rays for killing digital camera, it is neither a wellbeing peril to human nor it will influence the recognized camera's activity. This discovery and deactivation technique for camera or other optical gadget can be more helpful in protection zones to distinguish conceivable assaults.

II. LITERATURE SURVEY

Design of IR based Image Processing Technique for Digital Camera Deactivation.

In this paper, we propose another procedure for identifying and deactivating digital cameras in photography disallowed regions. This procedure will find a camera and after that kill it. It utilizes picture handling for distinguishing camera's focal point or lens. Subsequent to finding camera's focal point an infrared light will be coordinated towards that focal point which will contort the picture by overexposure. The coordinated infrared light causes solid diminishment in the nature of the picture. It doesn't meddle with camera's activity and it is innocuous to the camera client. The proposed work has applications, for example, forestalling robbery at theaters. This work will serve gainful at spots, for example,

IJARCCE
ISSN (Online) 2278-1021
ISSN (Print) 2319-5940
International Journal of Advanced Research in Computer and Communication Engineering
ISO 3297:2007 Certified
Vol. 7, Issue 3, March 2018

galleries, enterprises, authentic landmarks, displays, evolving rooms, shopping centers, gems stores where keeping up mystery is huge issue.

Piracy Prevention System for Movie Theatres and Auditoriums

A standout amongst the most main strategies the movie privateers use to carry the film out of the theaters includes recording the film utilizing a camcorder or a top of the line cell phone with a decent quality camera. Henceforth it is important to build up a system that tends to this traditional method for motion picture robbery. This paper proposes an answer for this issue. The proposed system makes utilization of picture preparing procedures over a picture obtained from a camera mounted at a reasonable area over the movie theater screen. A comparable system can be utilized to ensure exclusivity of programs held in theaters and introduction lobbies.

Arduino based Anti-Photography System for Photography Prohibited Areas

Digital cameras and advanced cells with cameras are extremely basic nowadays. These cameras utilized CCD sensor, which is in charge of changing over light falling on it into proportional electric charge and process it into electronic signs. When we visit places, for example, banks, courts, theatres and so on individuals tend to catch pictures of the site which meddles with the protection of the site proprietor. This paper goes for an answer which will distinguish the cameras which are interfacing with protection or security of site proprietor. After discovery of camera a solid light source i.e. LASER will be engaged onto that camera's focal point, the featured substance of the picture will be misshaped because of overexposure of light. Result demonstrates the usage of this proposed arrangement.

III. PROPOSED SYSTEM

In our proposed system, a method for identifying and harming video nature of advanced cameras in photography restricted zones in view of picture handling is composed. The system will comprise of two sections: Camera location unit and Camera deactivating unit. Camera location unit incorporates web cam interfaced with PC. Web cam will be utilized to catch the pictures of precluded zone. The situation of the camera focal point will be observed by distinguishing and following the focal point. Discovery and Position of the focal point of camera will be followed by picture preparing. Control motion from camera recognition part will be created and sent through serial correspondence to microcontroller. IR transmitter will be utilized to lessen the nature of the caught picture. IR transmitter will be fitted on to the servomechanism. Servomechanism will be interfaced with Microcontroller. After location of camera focal point and its position a flag will be sent to Microcontroller board and board will work servomechanism with the end goal that IR transmitter will point toward distinguished focal point and emanate solid IR beams which will decrease the nature of caught picture.

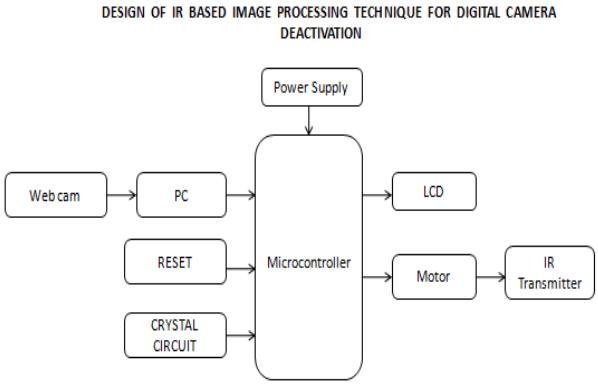

Figure 1: Block diagram of proposed system

- Algorithm running in Matlab will be continuously looking for camera lens.
- Once the lens is found it will send signal to raspberry pi.
- Depending on the location of camera in the captured picture raspberry pi will point and activate the IR array on the lens.
- For demo purpose we will be dividing the captured image into 5 different locations so that IR array can be pointed to those locations.

IV. APPLICATIONS

- shopping malls,
- Jewelry stores
- changing rooms

- exhibitions
- Historical monuments

V. ADVANTAGES

- This system is designed to increase the security level.
- This system will have low cost, low power consumption and high accuracy.

VI. CONCLUSION

The principle goal of this paper is to plan IR based picture preparing procedure for digital camera deactivation in photography precluded region. This system will find the greatest number of cameras by utilizing picture preparing calculations. The recognized cameras will be deactivated utilizing IR transmitters. This work will serve useful in the zones, for example, theatres for counteractive action of robbery. It has numerous applications which incorporate keeping up mystery at resistance territories, enterprises, innovative work segments, chronicled landmarks, religious spots, adornments stores, changing rooms at shopping centres.

REFERENCES

[1] L. Mieremet, Ric (H.)M.A. Schleijpena, P.N. Pouchelle,"Modeling the detection of optical sights using retro-reflection",Laser Radar Technology and Applications XIII, edited by Monte D. Turner, Gary W. Kamerman, Proc. of SPIE Vol. 6950, 69500E,2008
[2] Khai N. Truong, Shwetak N.Patel ,Jay W. Summet ,Gregory D. Abowd,"Preventing camera recording by designing a capture resistant environment", Proceeding UbiCom'05 proceedings of 7th International Conference on Ubiquitos Computing , Pages 73-76, Springer-verlag Berlin, Heidelberg.
[3] Virendra Kumar Yadav, Saumya Batham, Anuja Kumar Acharya, "Approach to accurate circle detection: Circular Hough Transform and Local Maxima concept", Published in Electronics and Communication Systems (ICECS), 2014, International Conference on 13-14 Feb. 2014,
[4] J. Lukas,J. Fridrich,M. Goljan,"Digital camera identification from sensor pattern noise",Published in: IEEE Transactions on Information Forensics and Security ,Page: 205 - 214,Volume: 1, Issue: 2, June 2006 .
[5] Panth Shah, Tithi Vyas, "Interfacing of MATLAB with Arduino for Object Detection Algorithm Implementation using Serial Communication", International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181,Vol. 3 Issue 10,page no. 1069-1071, October- 2014

.