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IBMS: Intrusion Based Movement Detection System

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Abstract - *A python and java based application which uses machine learning engrossed in raspberry pie to detect any type of interference between the diode and the imperceptible ray of light which acts an beacon to notify the raspberry pie of any type of intrusion.*

Key Words: Raspberry Pi, Python, Email, Smartphone, Sensor, Camera, Java, API.

1. INTRODUCTION

The application works as a platform to develop a security system which will record the intruder whilst he is committing the crime and sends the owner a web link and an alert on his registered device. The reason to make this application is to serve as secure medium for college locker systems. College lockers are more prone to intrusion as they have low to none security arrangement which result in loss of personal belongings or data. Our application will help student have a peace of mind that their belongings are safe in their lockers.

1.1 Application Overview

The application is designed to act as IDS for college locker systems. It uses a java based API to display the live video feed on the web browser. The user needs to register his/her device to receive the intrusion alerts from the system.

The primary system is based on kali Linux and python as they provide a better and faster response time than other available system. It consists of a light emitter which emits invisible ray of light which constantly falls on the diode which is read as “0” by the raspberry pie and when an interception occurs and the light is disrupted the sensor forwards this as a problem, the raspberry pie reads this as “1” and alerts the user that someone tried to access their locker.

2. OBJECTIVES

1. Main objective is to provide a platform through which any uncertain activities could be monitored
2. To reduce the effort a camera is installed which will record and show the life stream.
3. To make the environment more secure to its use.

3. CONCLUSION

As the current locker situation is known, our main motive is to provide students and teachers a peace of mind so that they can carry on with their work and academics. The main focus is to provide a cost effective, user friendly, security system which can be implemented with little to know efforts and will easily help the students and teachers safeguard their personal belongings. It reduces the stress on the already available security council as it provides admissible evidence investigation.

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