

ADVANCED CCTV ANALYTIC SOLUTION

INTRODUCTION

Surveillance system is a network of interconnected devices and technologies designed to monitor, record, and analyze activities in a particular area or environment.

The primary purpose of surveillance systems is to enhance security, gather data for analysis, and provide insights into various aspects of the monitored space.

The customizable alert settings allow for tailored notifications based on the severity of detected activities.

OBJECTIVE

The primary objective of this project is to detect the abnormal activities and send an alert message to the respective

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KEY FEATURES

1. User interface
2. realtime monitoring
3. face recognition
4. alert system

TECHNOLOGIES

Front End Development : Python 3.12.3(64-bit) or (32-bit)
Front End Design : HTML, CSS, Bootstrap
Back End : MySQL 5.
IDE : IDLE, Flask 1.1.1
Server : Wampserver 2i
Packages : TensorFlow,pandas, numpy

REQUIREMENT

1. Detection of abnormal behavior or activities based on predefined patterns or machine learning algorithms.
2. Integration with law enforcement systems to automatically generate alerts and notifications.
3. Geospatial analysis to identify crime hotspots and trends.
4. Strong encryption should be used to protect sensitive data, and access controls should be implemented to prevent unauthorized access.

BENEFITS

1. High accuracy
2. Less false positives
- Provide secure environment.
3. Automatically alert the officers.
4. Protect the surroundings from criminal activities.

CONCLUSION

The project has successfully achieved its objectives of enhancing security measures through proactive abnormal activity detection, providing timely alerts, and ensuring user-friendly interaction through a unified web-based dashboard. The system's performance, as validated through rigorous testing, showcases its reliability, accuracy, and scalability.

FUTURE SCOPE

Facial recognition technology: Integrating facial recognition technology into the system can enhance its accuracy in detecting potential threats and identifying individuals involved in criminal activities.