Child Alert

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Executive Summary

The problem of child trafficking and resulting menaces to the society are already known. These issues are particularly serious in some areas of the world. There is a need to provide technology oriented tools to help reduce abduction of children which actually kick starts the chain reaction of the child abuse, child trafficking, and all related evils. In this document we discuss the possibility of such a solution to potentially reduce the abductions of children near school place.

Introduction

There are certain evils which target the vulnerable portion of the society-children, and the abduction and then children trafficking is one of the most heinous ones. Blocking this activity alone can stop complete chains of

1. Sex slavery
2. Abuse
3. Childhood traumas
4. Broken families
5. Problematic youth

While national and international institutions keep working to eradicate this evil, there are certain unattended options that can reduce such events significantly.

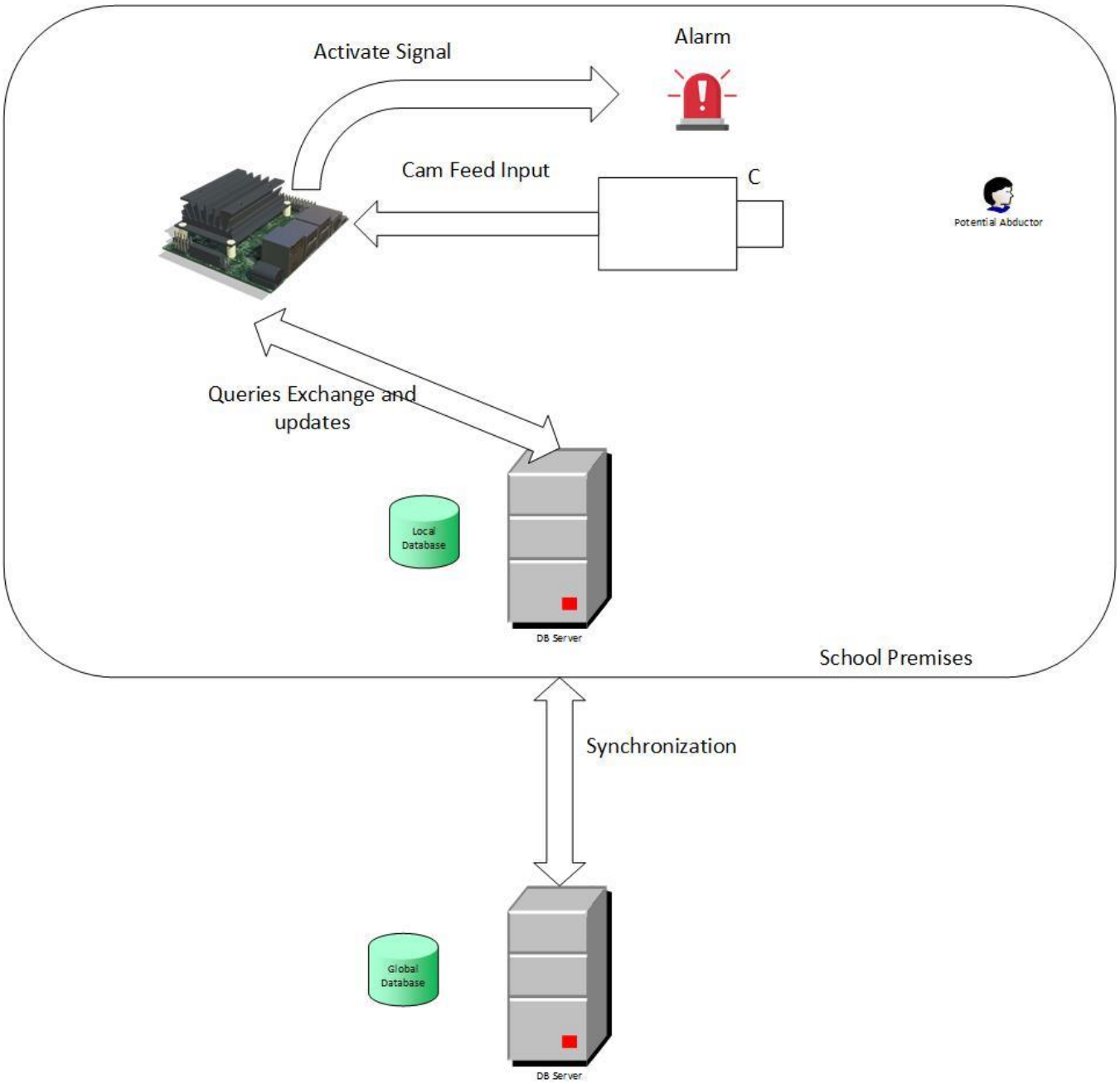
Our Solution

We suggest a complete integrated, dynamic and multipurpose system that combines functionalities of the available AI computer Vision tools to recognize criminals approaching children using a database of faces. Upon recognition, the system informs the authorities and rings the alarms loudly to avoid the possible upcoming mishap.

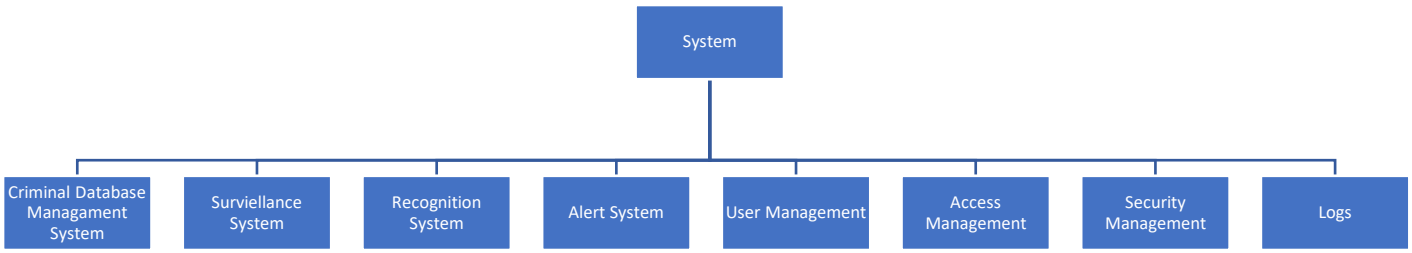
The objectives of this project are to provide a single dashboard with tools to:

1. To identify a potential abductor approaching children in a school
2. Ring an alarm, inform the authorities in near real time fashion
3. Keep an updated global and local database of criminals of concern with their profiles
4. Maintain connectivity with the law enforcement

A Scenario depicting the final system



Block Diagram of the proposed system:



Tools and technologies:

- Front End: - AdminLTE, HTML, CSS, JavaScipt, PyScript, TensorFlow.js
- Back End: - Python, Django, OpenCV, PyTorch
- DBMS: - MySQL
- OS: Linux/Windows

HR Required

a. Developers
   i. Computer Vision
   ii. Web Interface
   iii. UI/UX
   iv. Testers
b. Network Security Specialists
c. Technicians for equipment installation

Hardware

Hardware Setup-MVP
1. 2XCCTV Cameras 2. Jetson Nano 3. Database Server 4. Connectivity **5.** Misc