Building a Smart Intruder Detection System with OpenCV and your Phone

Problem Statement: The project aims to develop a smart intruder detection system using computer vision techniques and mobile phone cameras. Traditional home surveillance systems can be costly and complex to set up. This project addresses the need for a simpler and more affordable solution by leveraging the capabilities of mobile phone cameras and OpenCV, a popular computer vision library.

Objective: The objective is to create a system that can:

1. Access a live video stream from a mobile phone's camera to OpenCV on a PC.
2. Use motion detection algorithms to identify intruders in the video feed.
3. Record video samples whenever an intruder is detected.
4. Send alert messages to the user via the Twilio API.

Conclusion: By implementing this project, users can build a cost-effective and efficient intruder detection system for home surveillance. The system offers flexibility by allowing users to use their mobile phone cameras or IP cameras for video streaming. Additionally, it provides real-time alerts and video recording capabilities, enhancing security and peace of mind for homeowners.