

# **SMART SURVEILLANCE**

## **1. INTRODUCTION**

The development of a smart surveillance system with advanced features such as motion detection using contours and real-time people tracking using YOLOv3 is presented in this project. The system uses computer vision algorithms to analyze the video feed from existing surveillance cameras, identifying areas of motion and tracking the movement of objects within those areas. To detect and track people specifically, the system uses object detection algorithms like YOLOv3. The project requires expertise in computer vision, machine learning, and software development, as well as access to large datasets of labeled video footage and powerful hardware to process the video feed in real-time. The system has the potential to improve surveillance systems by providing more accurate and efficient monitoring of people and objects in real-time.

### **1.1 PROJECT OVERVIEW:**

The aim of this project is to develop a smart surveillance system that can be integrated with existing surveillance systems to provide advanced features like motion detection using contours and real-time people tracking using YOLOv3. The system uses computer vision algorithms to analyze the video feed from surveillance cameras and identify areas of motion, while object detection algorithms like YOLOv3 are used to detect and track people in real-time.