

# Geofencing: Safety System for Children

*(A smart AI-Based Safety System for Children)*

AI club & Voxel51 Hackathon March 9th Sunday 2025

## **By Team Members:**

Aniruddh Nair  
Hiral Choksi

Musarah Muhammad  
Anan Khan

# Problem:

During recess, children are let loose outside, that also means they can wander into restricted/dangerous areas. Teachers aren't always paying attention to every kid so there is a real possibility of that kid getting hurt

# Solution:

A visual ai that tracks students positions in real time and sees when they cross into a "restricted" zone.

# Demo and Future Enhancements

## Demo Overview

- AI powered detection of a person within a boundary
- Alert mechanism when a person leaves the safe area.

## Future Improvements

- Integration with multiple cameras for larger areas.
- Expansion to schools, malls, and public parks.
- Larger dataset to more accurately detect people



# Technologies Used

- YOLOv8 – Real time object detection
- Coco-2017 – Dataset
- Cv2
- Numpy

# Conclusion and Questions

- Enhances child safety through AI automation
- Scalable for various public spaces

## Next Steps

- Prototype testing in real world sceneraries
- Gather feedback and refine the system