

## OBSTACLE DETECTION AND TRACKING FOR WAREHOUSE ROBOTS

### OBJECTIVE

A Human Obstacle Detection and Tracking system for Acme's warehouse robots aimed at improving safety and efficiency in material handling operations

### APPROACH

The Human Obstacle Detection and Tracking system uses:  
YOLOv5 for real-time human detection.  
OpenCV for localization and tracking.

### IMPACT

Acme corporation is the primary stakeholder.  
The software impacts the working conditions of the warehouse employees.

### MEASURE OF SUCCESS

Achieve high accuracy in human detection and tracking with minimal false positives.  
Ensure real-time operation without significant lag in detection and navigation