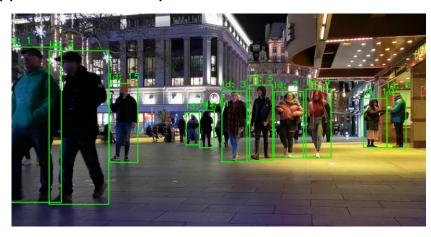
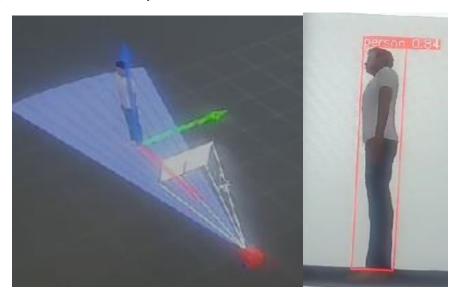
Advances - Project: "FANBOT" (Differential Human Follower Robot) Sebastian Grajales Pulgarin - 2205061

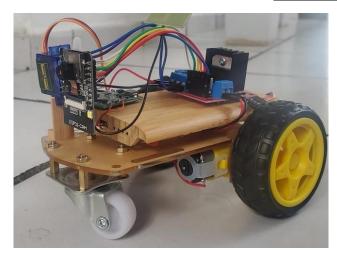
1. System for stopping people using yolov8 and tracking using Sort (implementation of Kalman filters) (STATUS: FUNCTIONAL):



2. Simulation of human tracking in a differential dynamics robot equipped with a camera using ROS2 (STATUS: FUNCTIONAL):

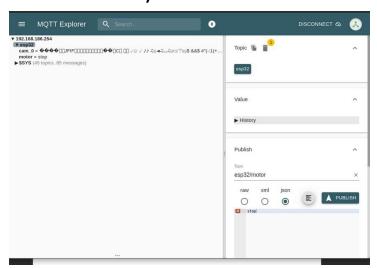


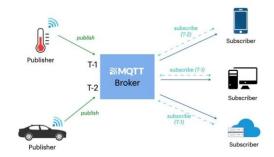
Manufacturing Prototype #1



- **Materials:**
- Esp32cam
- LN298 Module
- Motor driver 2 x Motors 6v 12v
- Servo motor 90sg
- Lithium battery 5000ma
- Photo encodres 2

4. IOT communication system using the MQTT protocol with the Mosquito Broker to receive the images from the Esp32cam and process them in the computer with yolov8 to return speed commands to the robot (STATUS: FUNCTIONAL):





5. Implementation of object tracking system in prototype #1, using the communication system with arduino, MQTT and python (Status: FUNCTIONAL).

