Here is a short summary of my main accomplishments over the past months, along with the requested images:

- Successfully set up the **Raspberry Pi 5** with **Intel RealSense D435**, integrated via **ROS Noetic in Docker**, with real-time image stream.

- Deployed and tested **YOLOv8n** object detection on the Raspberry Pi.

- Implemented a pipeline to **record and replay bag files**, enabling offline testing and evaluation on a laptop.

- Documented all setup and testing steps to ensure reproducibility and track progress toward a lightweight, deployable vision system.
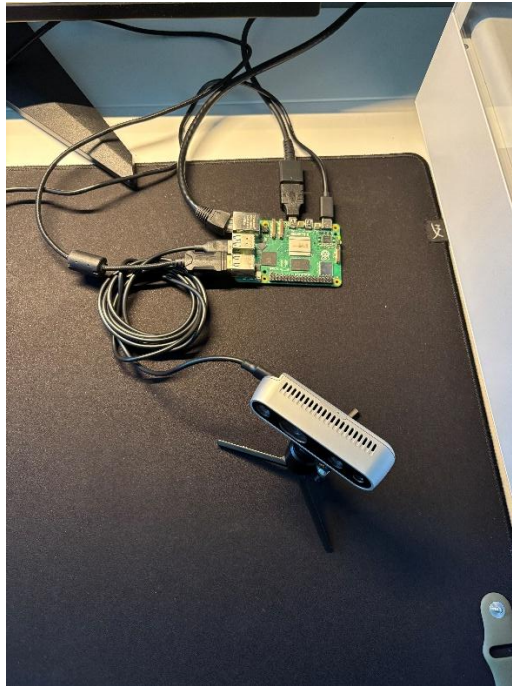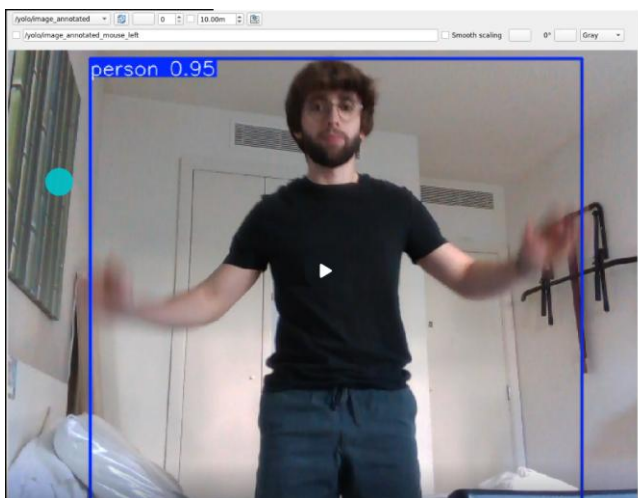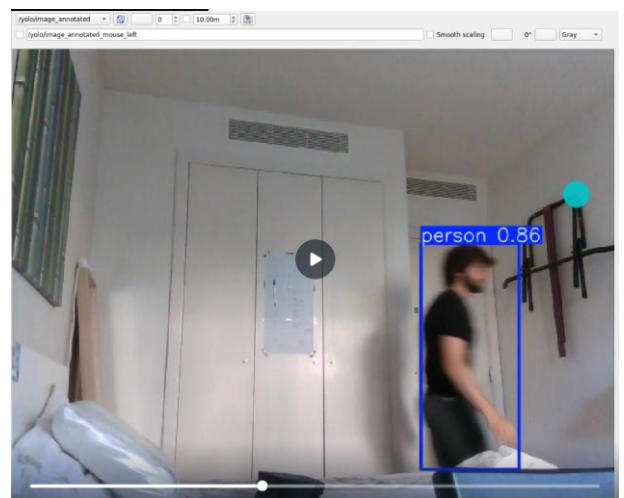

Figure 1: Hardware Setup

Figure 2:YOLOv8n running on Raspberry pi 5.

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