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.

A computer with a circuit board and a microphone

AI-generated content may be incorrect.

A person standing in a room with his arms spread out

AI-generated content may be incorrect.A person walking in a room

AI-generated content may be incorrect.Figure 1: Hardware Setup

Figure 2:YOLOv8n running on Raspberry pi 5.

Figure 1: YOLOv8n running on Raspberry pi 5.