ROBOTICS WITH NIRYO NED 2

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Enhancing Surgical Efficiency through the Integration of Niryo Ned 2 Robot for Equipment Assistance

Problem Statement:

The NIRYO NED 2 Robotic Arm serves as a surgeon assistant, significantly enhancing surgical workflow and safety. It identifies and gives the instruments to the surgeon, also moves the used instruments for sterilization using a conveyor belt.

Abstract:

An average surgeon spends 15 hours carrying out medical surgeries and may need assistance in handing over the right instruments during the operation. The Niryo Ned 2 arm robot serves as the surgeon's assistant by using vision camera to identify instruments kept in observation_place and handing it over to the give_place (doctor's hand).

After the surgeon is done using the instrument, it is handed over to the robot and it places the used instrument on the conveyor belt. The conveyor belt is set to motion to carry the used instruments for further sterilization.

Github Repository:

https://github.com/SrirakshaMS/NiryoNed2-Surgeon-Assistant