

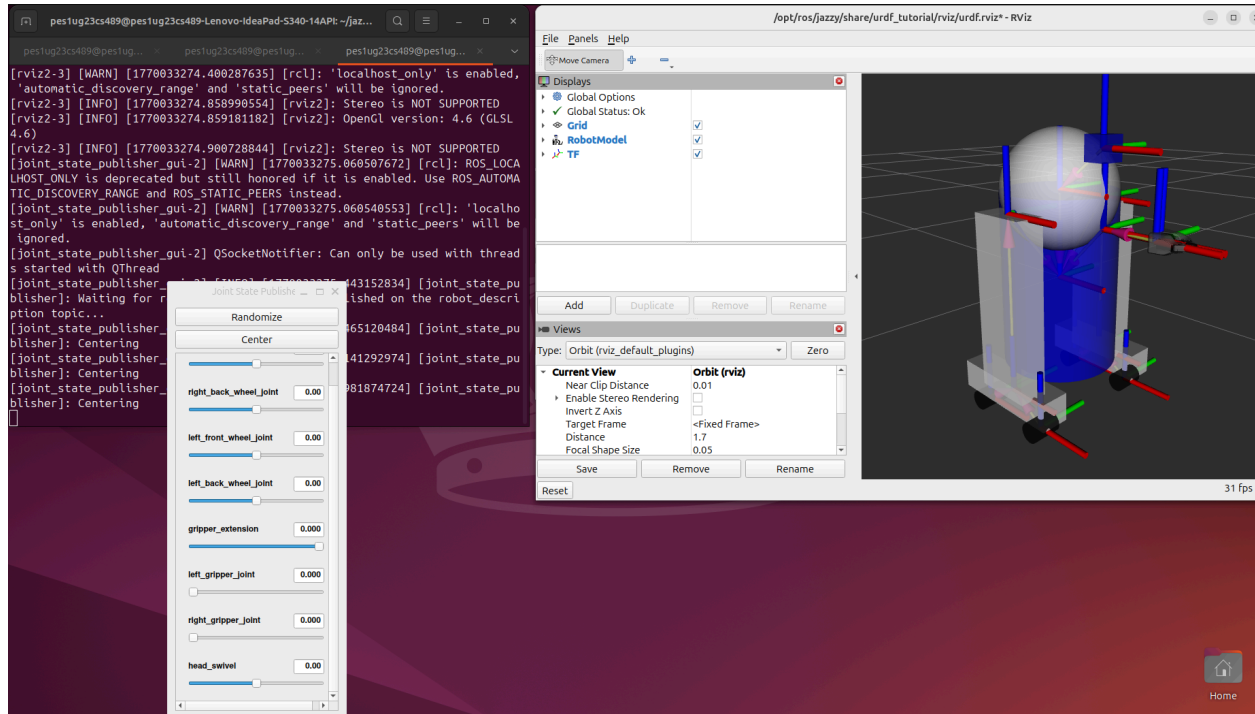
MARS LAB 3b

NAME - ROSHIT SHARMA

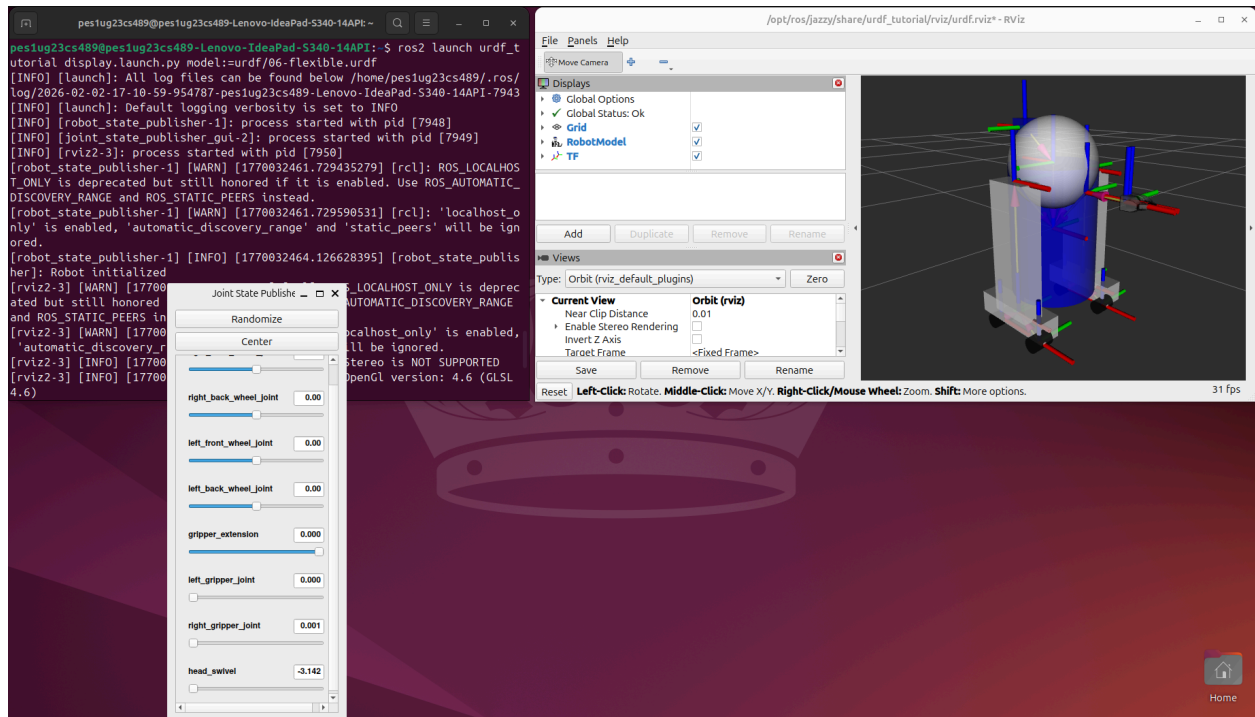
SRN - PES1UG23CS489

SCREENSHOTS

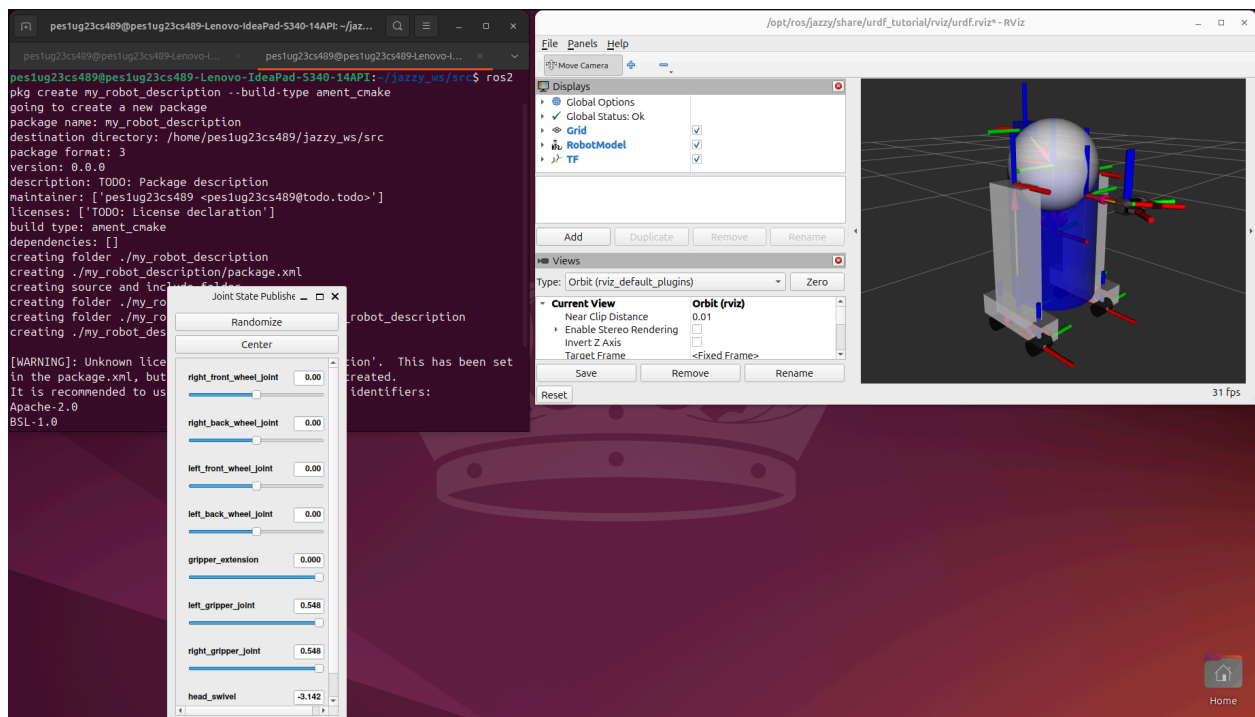
Normal



Head



Gripper



The image is a composite of three windows from a Linux desktop environment, illustrating the setup of a ROS2 robot model.

Terminal Window (Left): Shows the execution of ROS2 commands to create a new package named `my_robot_description`. The commands include `ros2 pkg create my_robot_description --build-type ament_cmake` and `catkin build my_robot_description`. The output shows the package being created and built successfully.

Joint State Publisher Window (Center): A window titled "Joint State Publisher" with a "Publish" button. It lists several joints and their corresponding positions in a table:

Joint	Position
right_front_wheel_joint	0.00
right_back_wheel_joint	0.00
left_front_wheel_joint	0.00
left_back_wheel_joint	0.00
gripper_extension	-0.207
left_gripper_joint	0.548
right_gripper_joint	0.548
head_swivel	-3.142

RViz Window (Right): A window titled "rviz" showing a 3D visualization of the robot model. The robot is a small cart with a spherical head and four wheels. The RViz interface includes a "Displays" panel with "RobotModel" selected and a "Views" panel with "Orbit" selected. The robot is positioned in the center of the field of view.

The screenshot displays a ROS2 workspace with three main components:

- Terminal Window (Left):** Shows the execution of `roslaunch urdf_tutorial display.launch`. It confirms that the `robot_state_publisher` and `urdf_tutorial` processes are running. It also shows a warning about `ROS_LOCALHOST_ONLY` being deprecated but still honored.
- RVIZ2 Configuration Window (Middle):** The `RobotModel` display is configured with the following settings:
 - Status: `Ok`
 - Visual Enabled: `✓`
 - Collision Enabled: `✓`
 - Mass Properties: `Update Interval: 0`
 - Alpha: `0.5` (Amount of transparency to apply to the links)
 - Description Source: `Topic`
 - Description File: `[empty]`
- 3D Visualization (Right):** A 3D model of a robot with a spherical head and a rectangular body, rendered in a transparent blue color. The robot is positioned on a white base with red and green axes.

