Advanced Remanufacturing and Technology Centre
ARTC

DEVELOPERS MEETING

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Agenda

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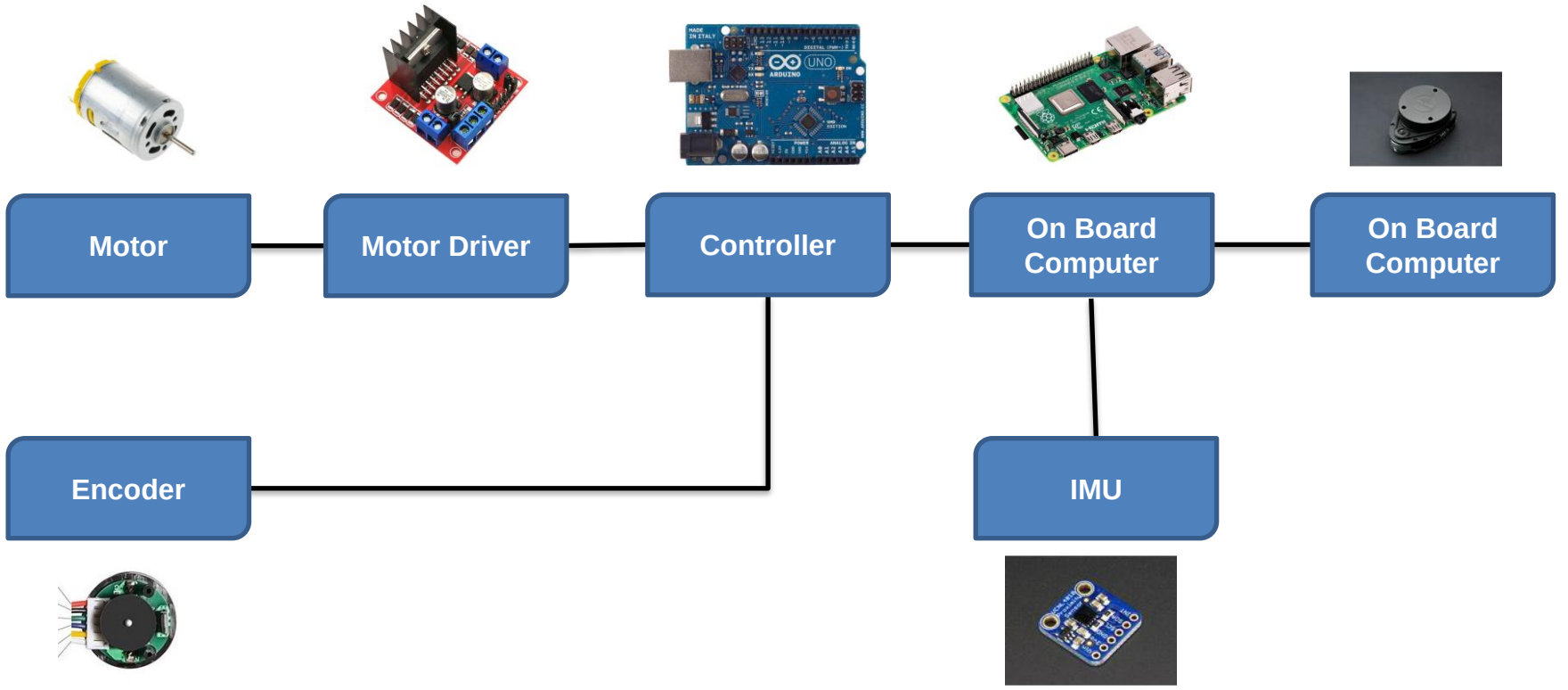
Architecture For Mobile Robots (High level Overview)



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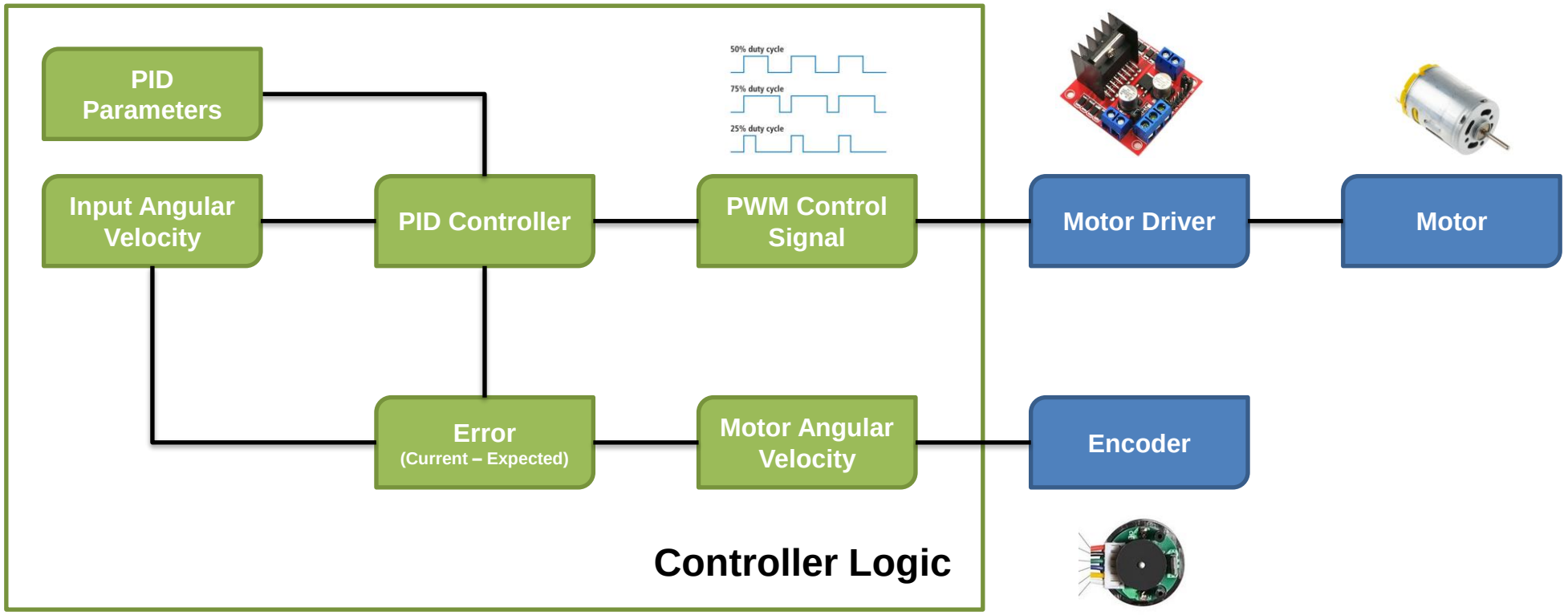
Architecture For Mobile Robots (Low Level Control Strategy)



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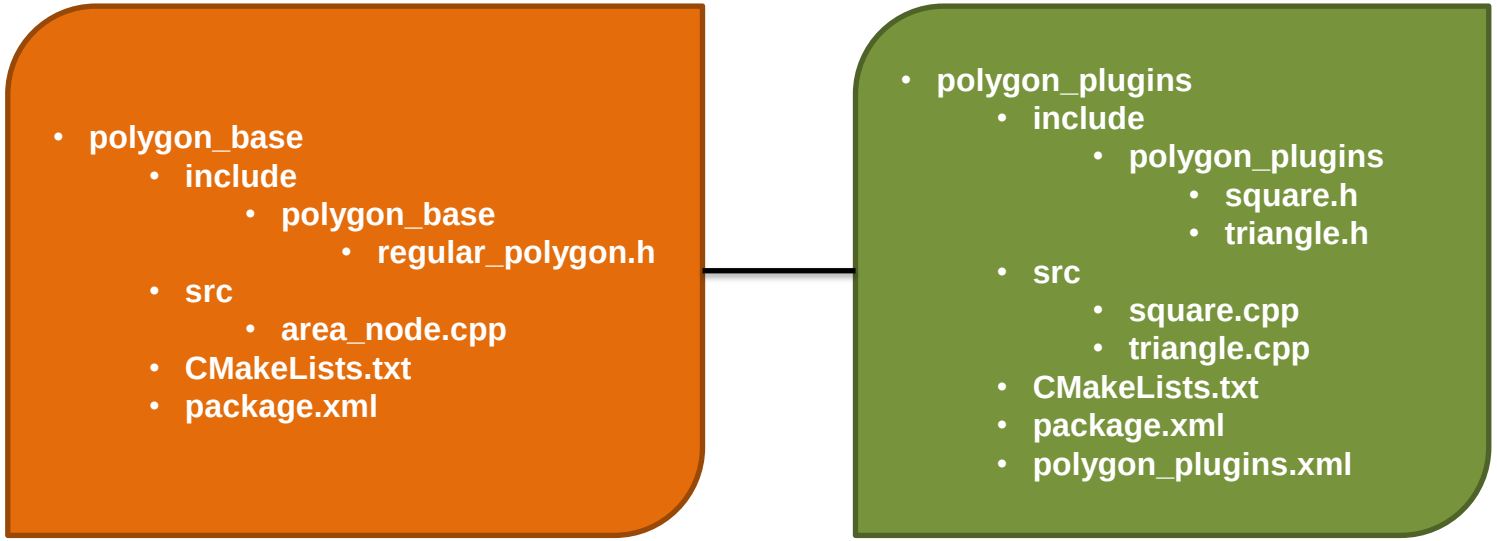
ROS Plugins



Notes

- Plugins allow dynamic loading of components
- In example provided central controller loads rectangle or square plugin dynamically
- Plugins need to be registered for the plugin loader to use
- Refer to the link for sample codes

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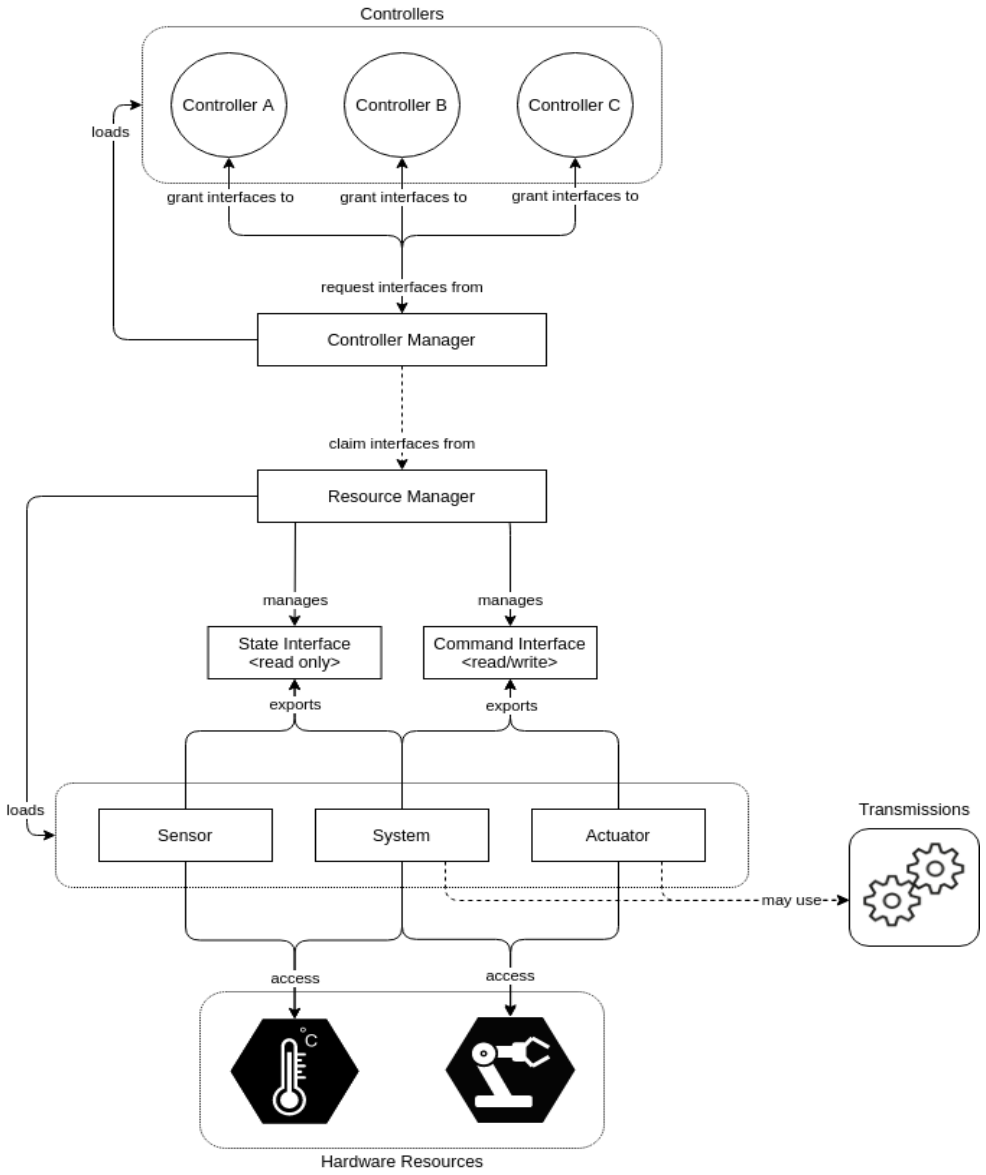
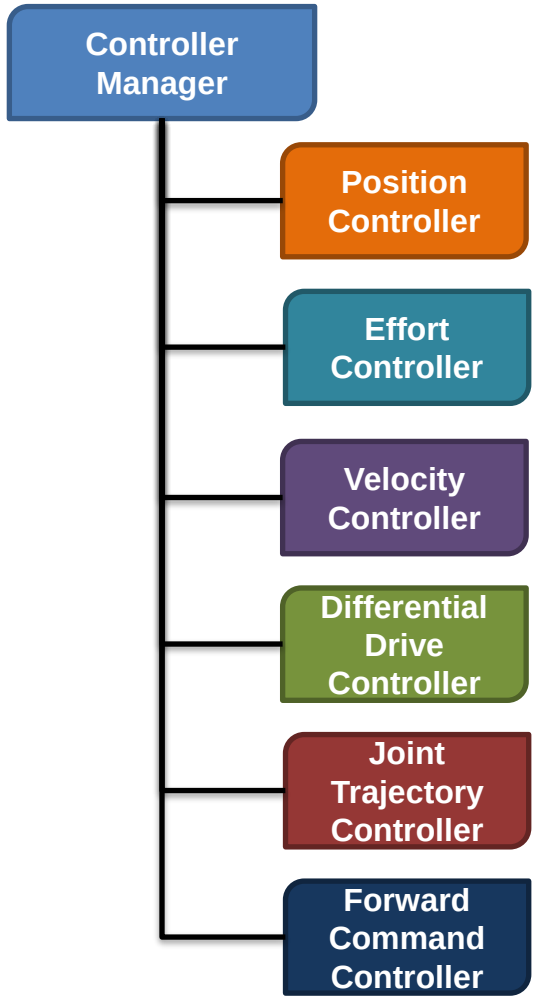
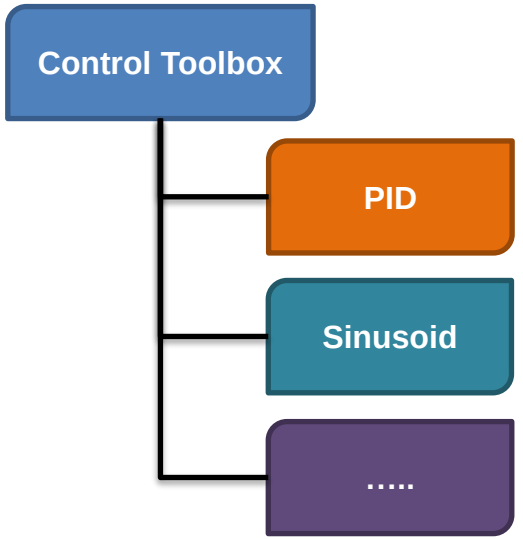
ROS Control (Overview)







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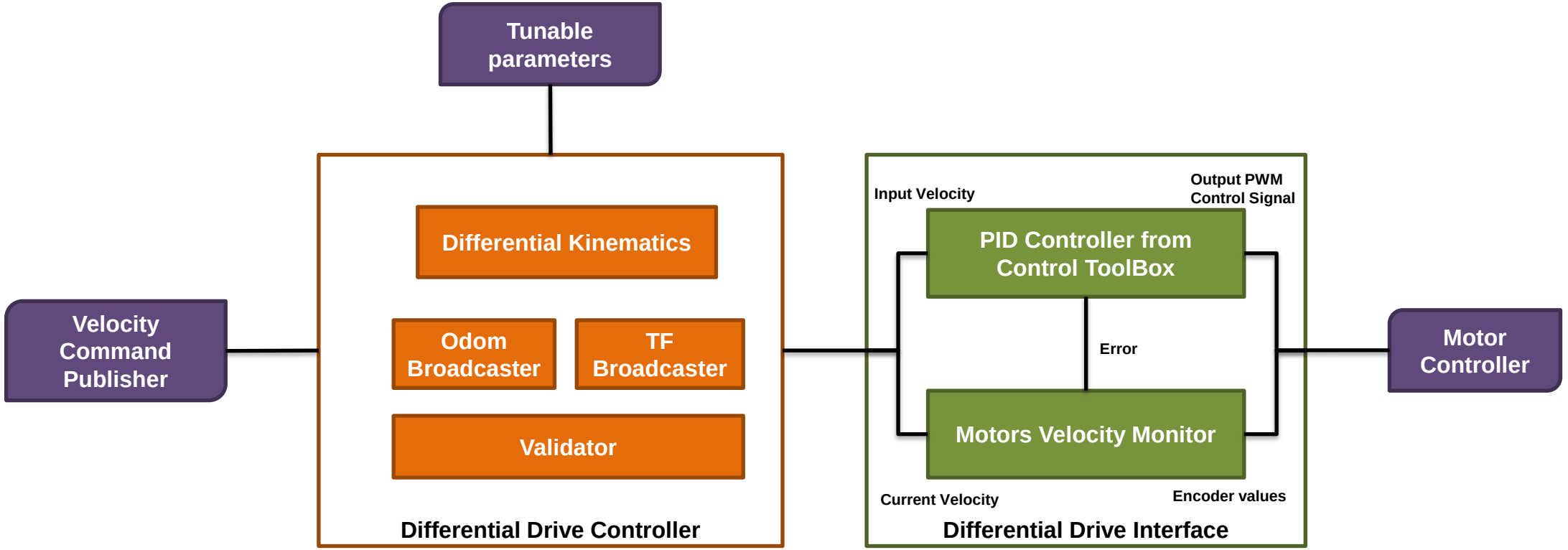
ROS Control (Differential Drive Controller)



- Available parameters for tuning
- Controller source code
- PID from Control ToolBox

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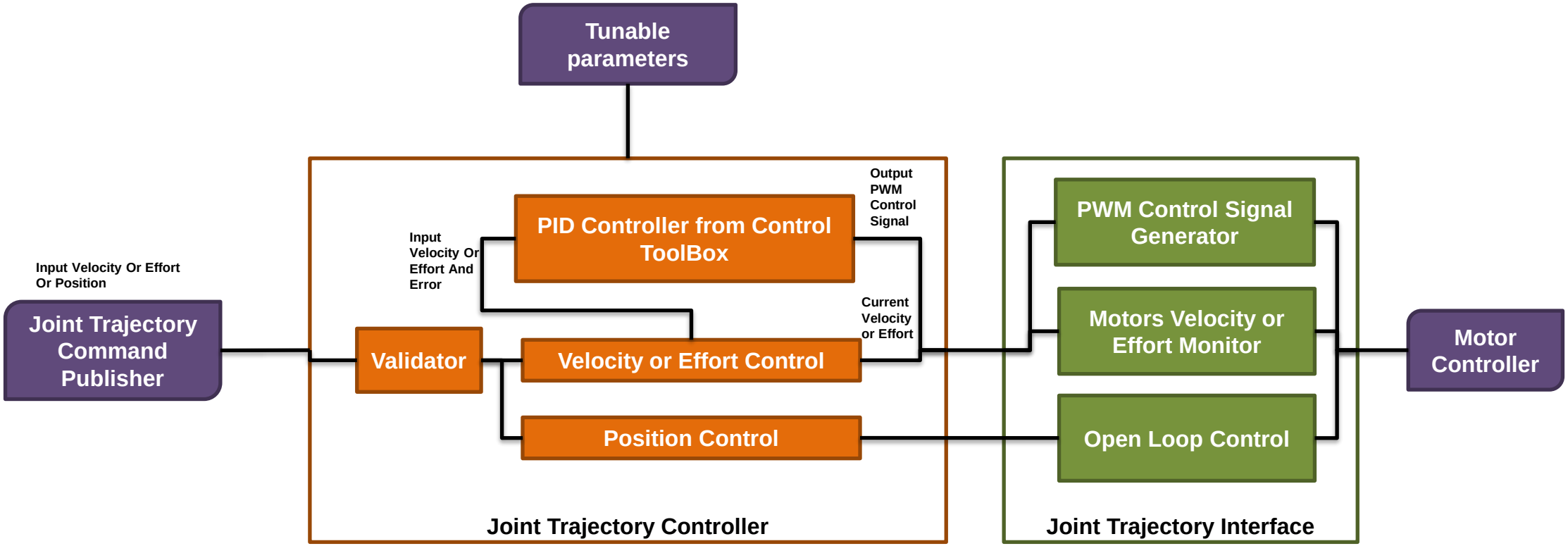
ROS Control (Joint Trajectory Controller)



- Available parameters for tuning
- Controller source code

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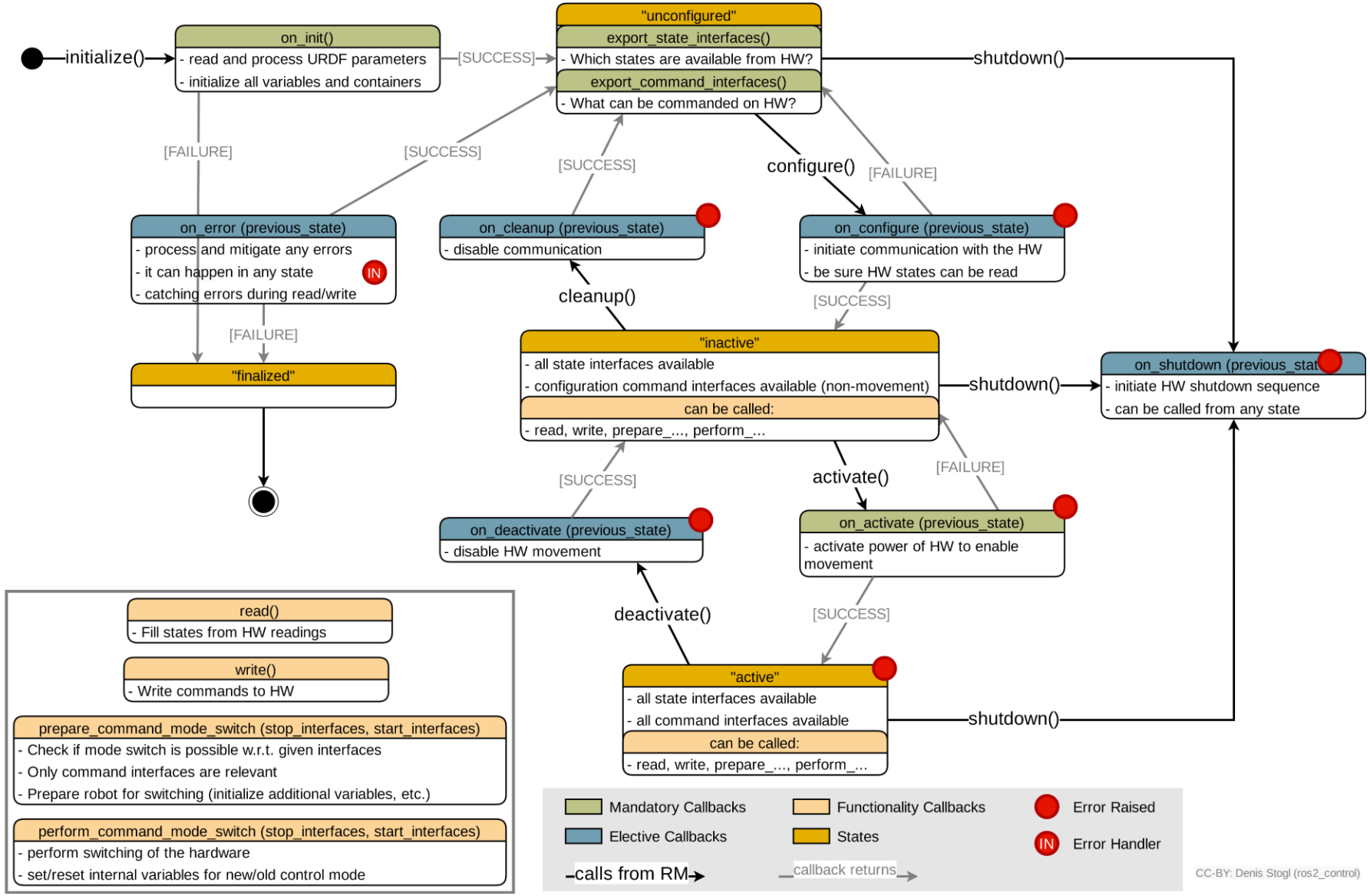
Hardware Interface Structure



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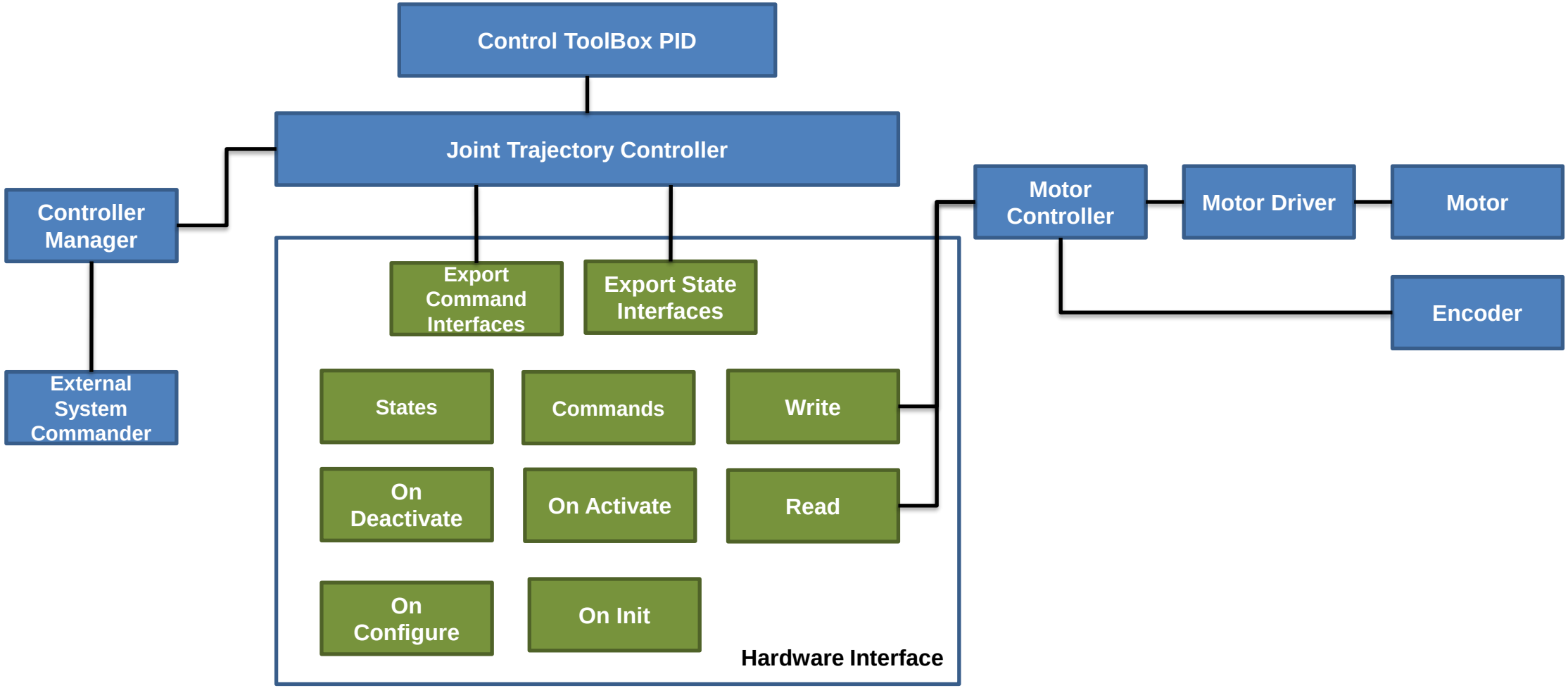
Demo Setup With ROS Control And Real Hardware (Structure)



[Check this link for sample packages]

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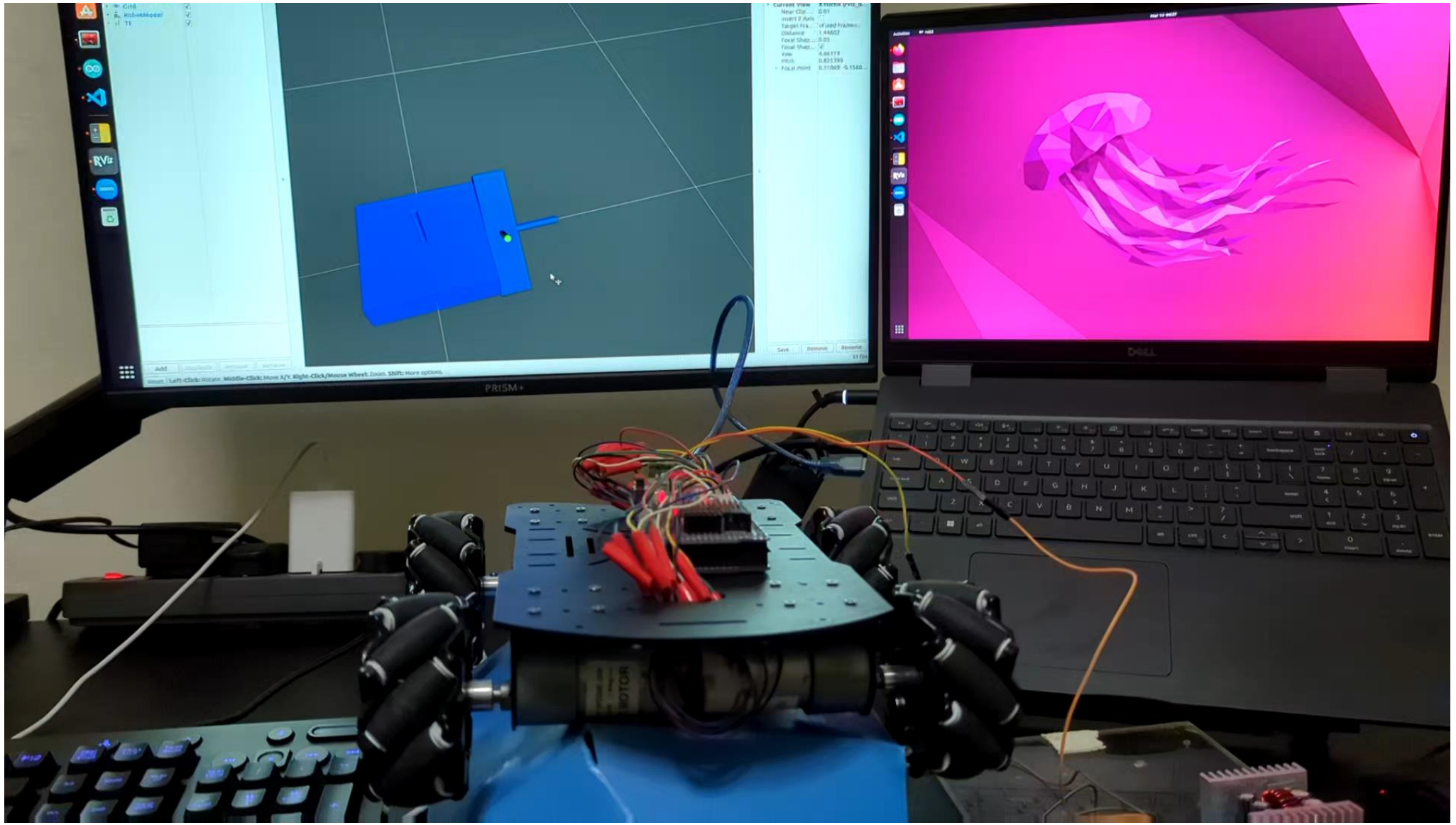
Demo Setup With ROS Control And Real Hardware (State Visualization)



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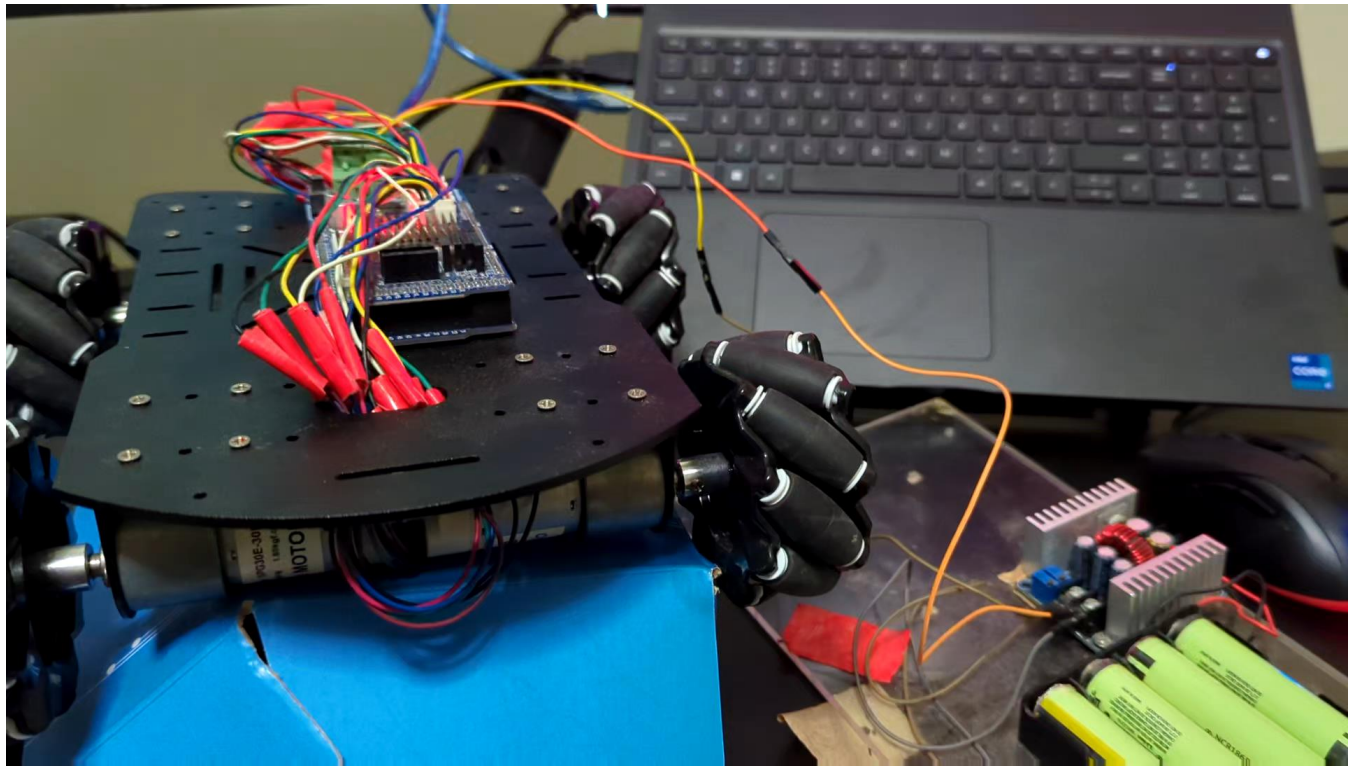
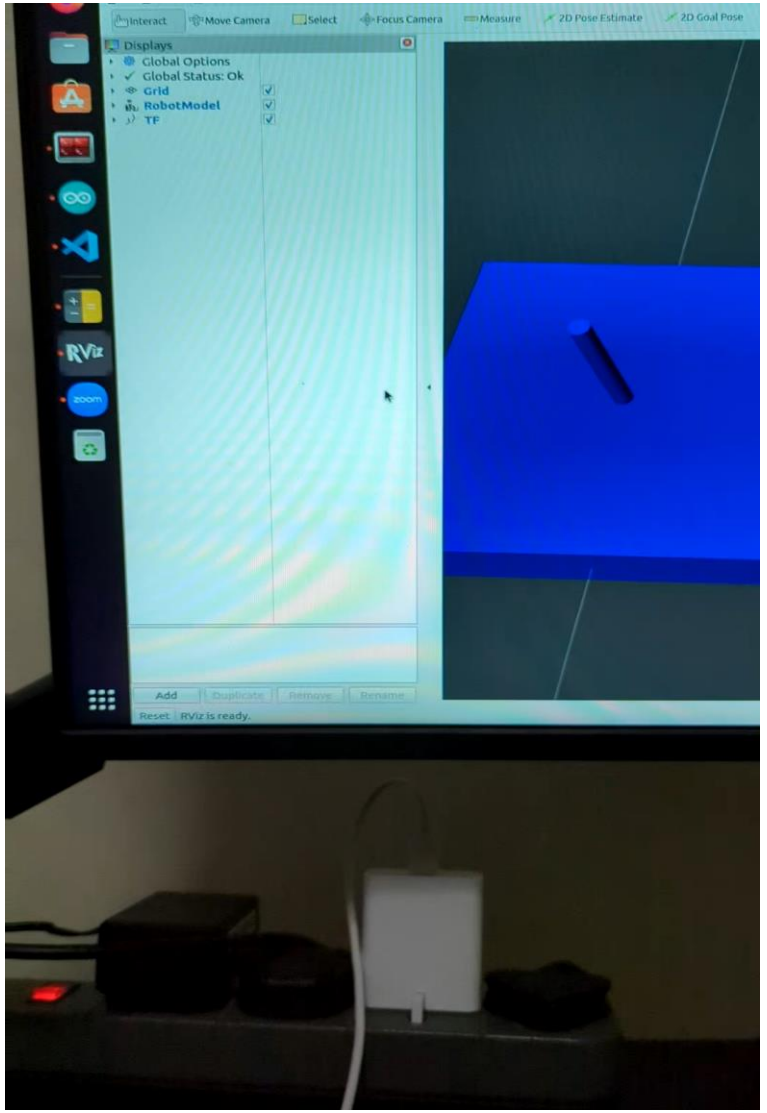
Demo Setup With ROS Control And Real Hardware (Joint Trajectory with internal PID)





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