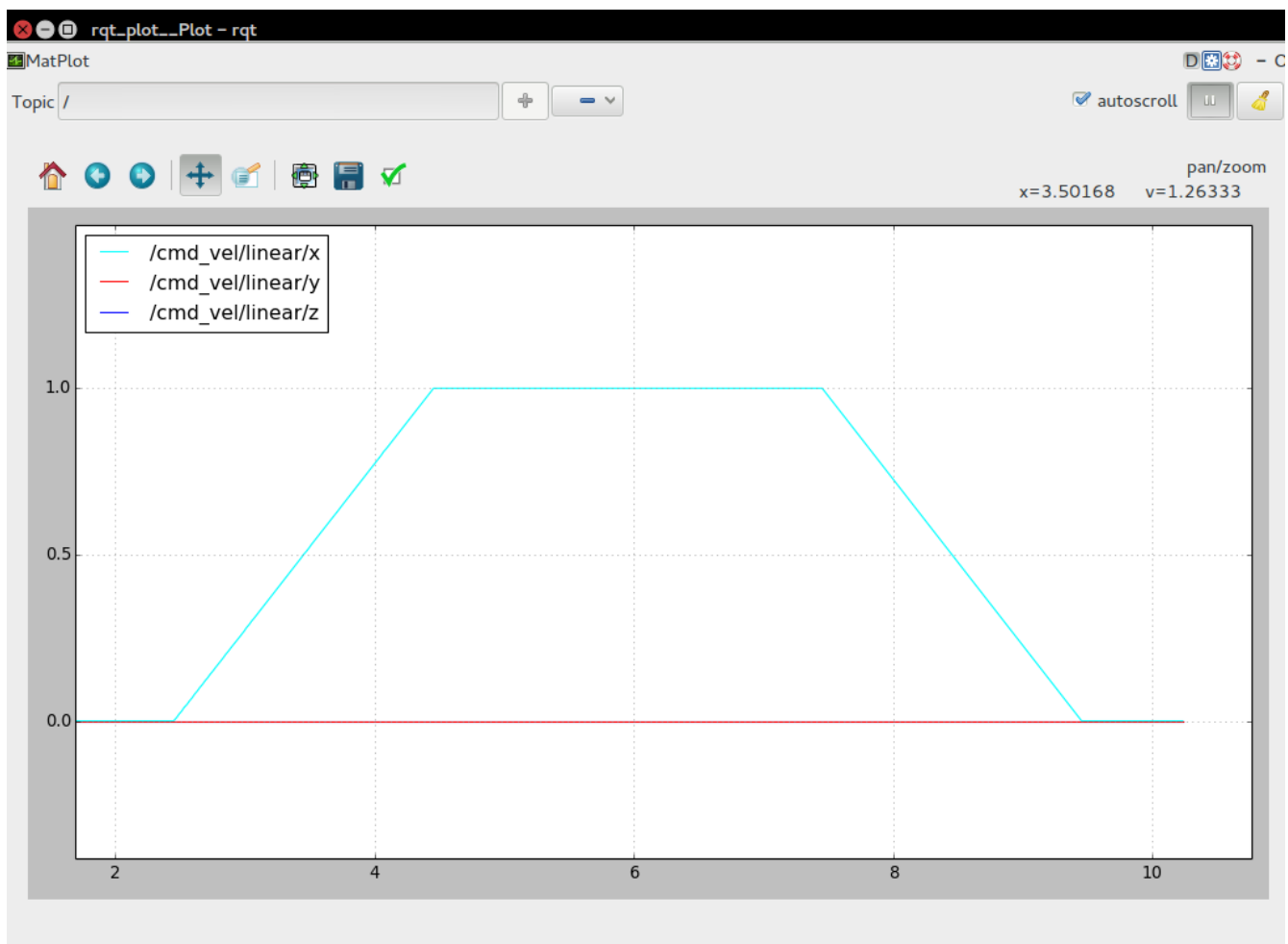


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rnk14  
Ps7: Velocity Profiling

In this submission you will find a copy of my writeup as a pdf as well as a zip folder with my code my video and my rqt\_plot output.

For the trajectory builder I began by taking the current state of the robot as a saved value and then clearing all trajectories from the robot. I then found all of the robots current positions, velocity, and orientation from this saved value. Then for all times where the robot needs to slow down I then pushed slow down values to the robot and added a secondary halt to ensure that the robot would stop completely.

The publish desired states was much simpler than the trajectory builder. To finish the publish desired states code I simply added a velocity command publisher and a pushback for this publisher. Below you can see how this ramp up and ramp down occurs for the velocity.



Github: <https://github.com/RossKasal/EECS476>

Youtube: [https://youtu.be/zg\\_QO69UJsI](https://youtu.be/zg_QO69UJsI)