



# Optical Illusions

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Lab4

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# Objectives

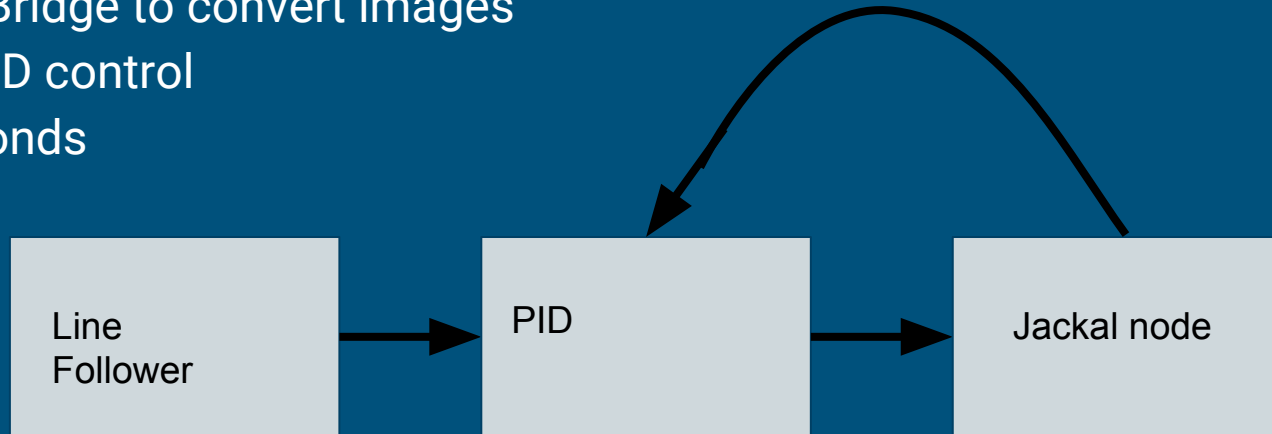
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1. Map Jackal Race World
2. Edit raceworld to include line
3. Create launch file to launch with Flea3 and Laser
4. Rosbag for /laserScan and /tf record
5. Playback while mapping
6. Map comparison

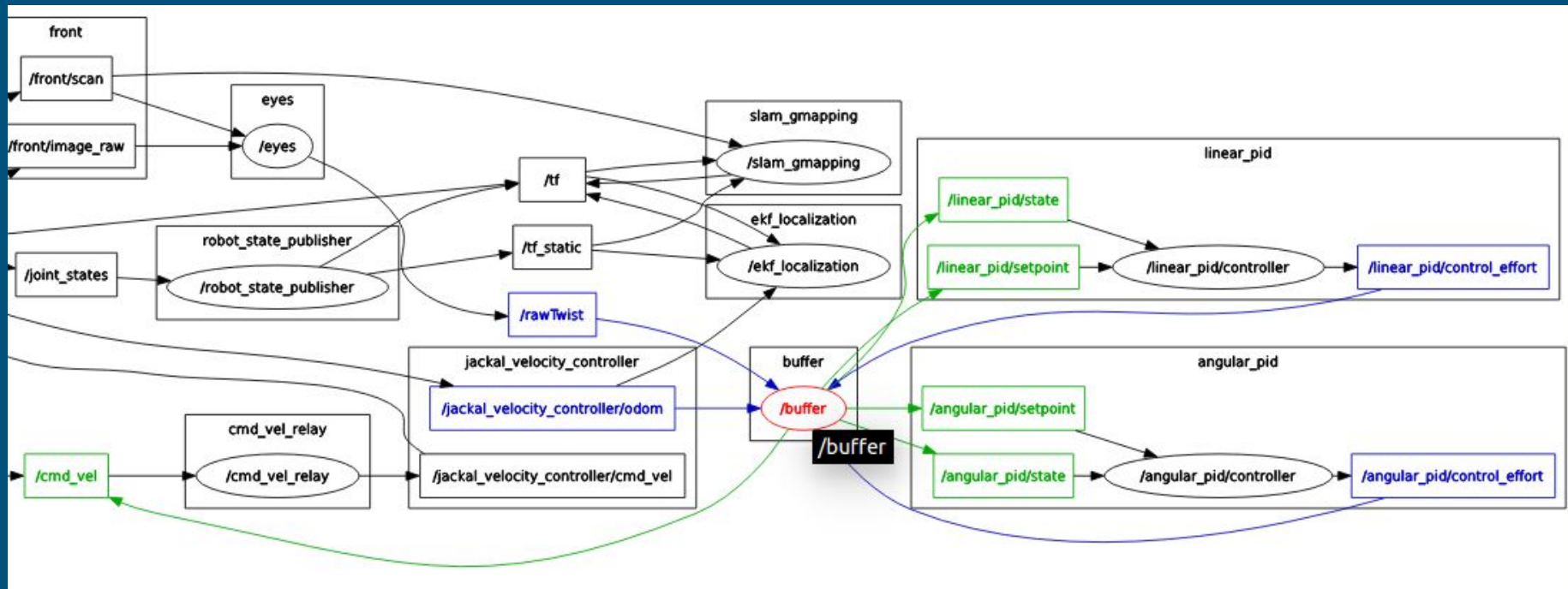
# Work done

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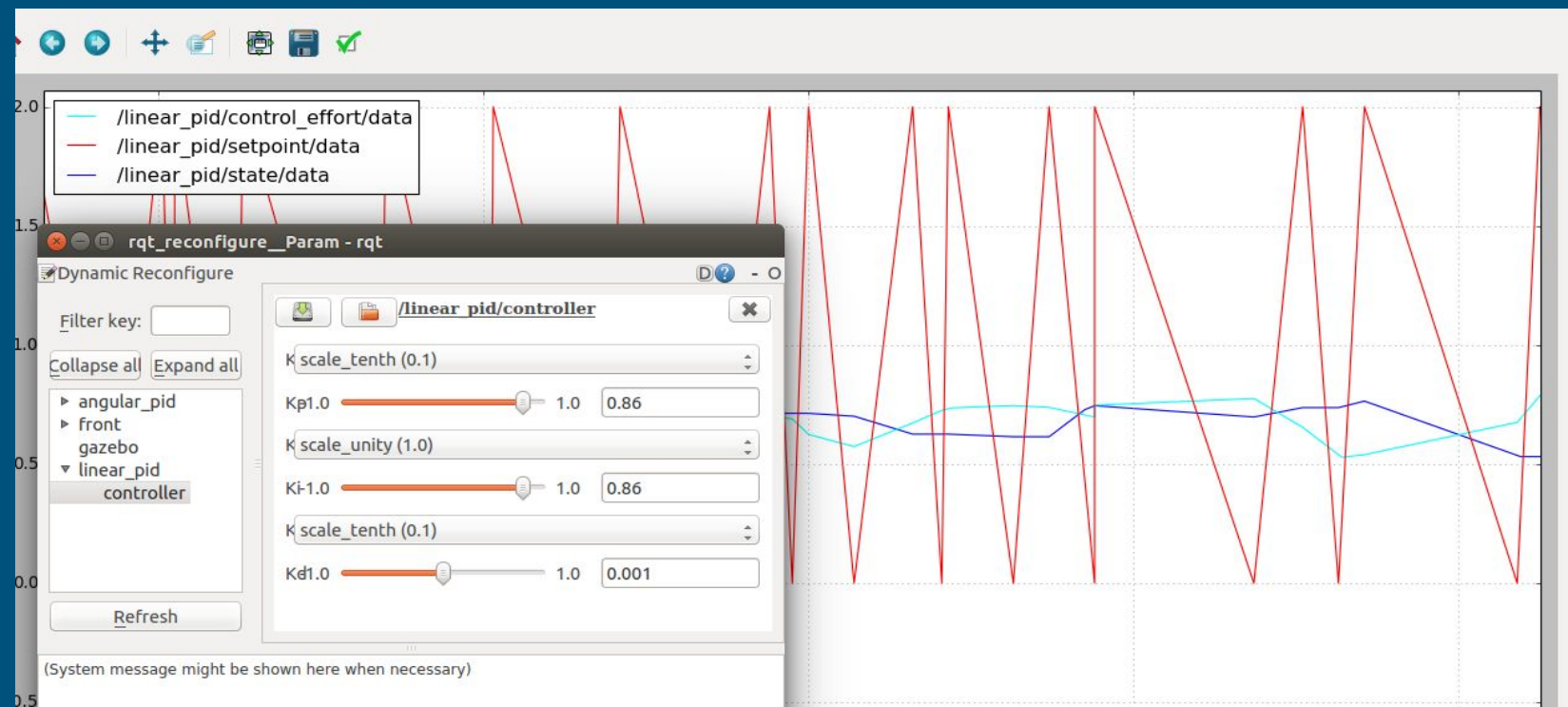
- Used old gmapping for race world mapping
- Used old launch file but modified for both launch parameters
- Used CvBridge to convert images
- Added PID control
- ~43 seconds



# Graph

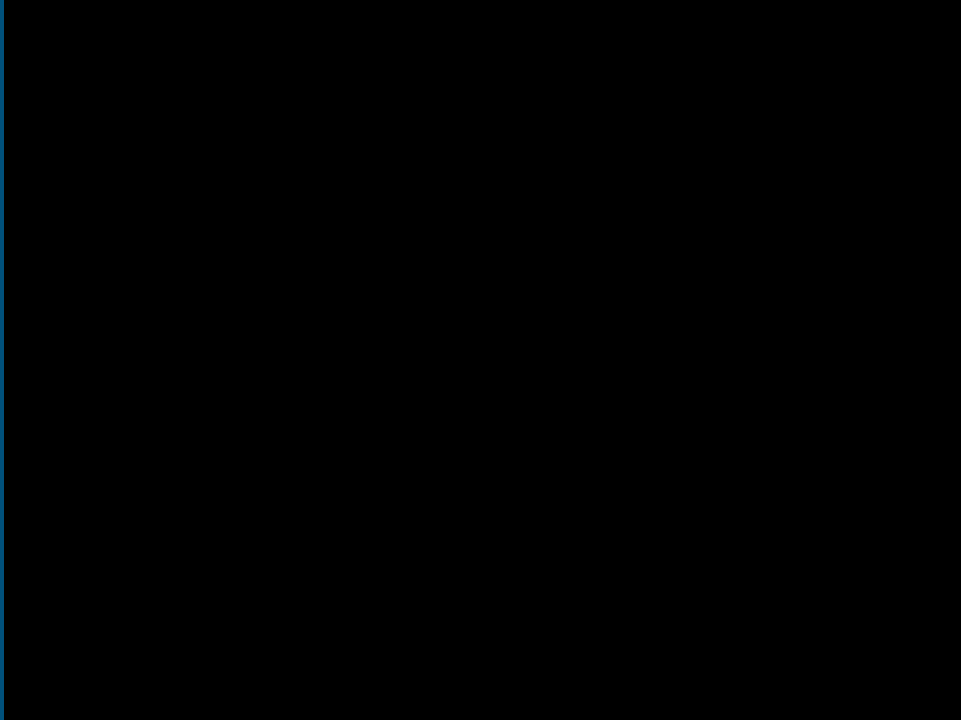


# PID



# Video

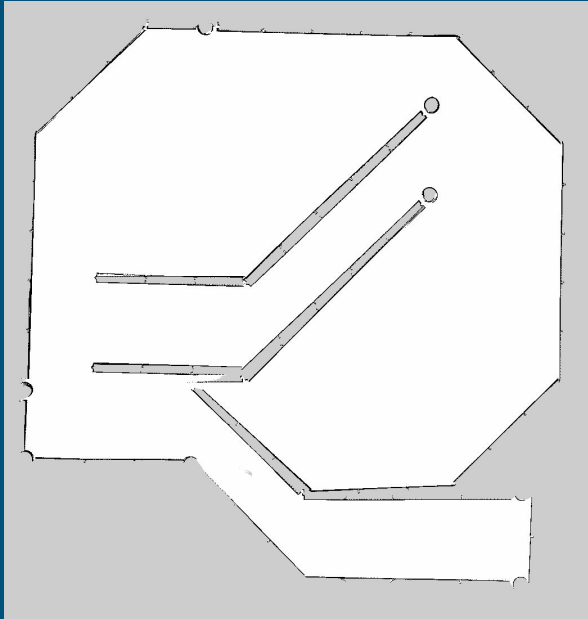
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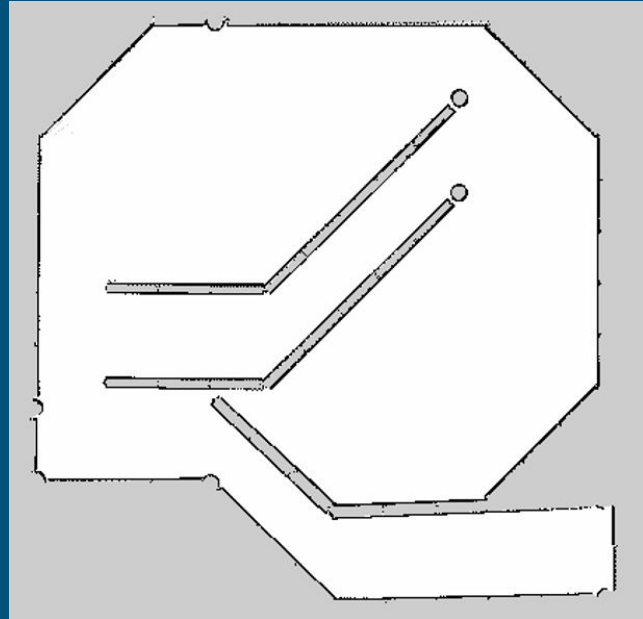
# Map Comparison

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Wall Following



Line Following



# References

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[http://wiki.ros.org/cv\\_bridge/Tutorials/ConvertingBetweenROSImagesAndOpenCVImagesPython](http://wiki.ros.org/cv_bridge/Tutorials/ConvertingBetweenROSImagesAndOpenCVImagesPython)

<http://wiki.ros.org/Manifest>



# Questions?

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