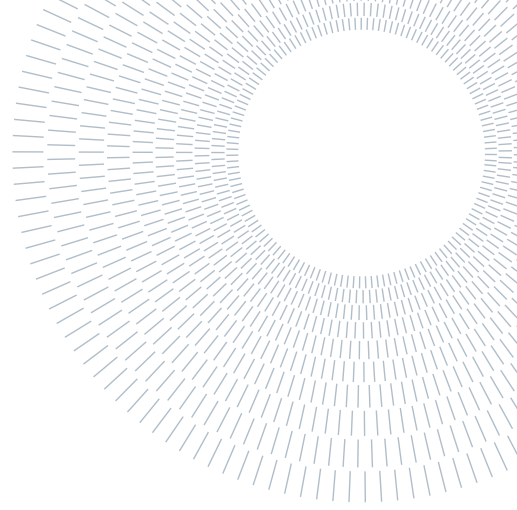




POLITECNICO
MILANO 1863

**SCUOLA DI INGEGNERIA INDUSTRIALE
E DELL'INFORMAZIONE**



Title

PROJECT FOR THE CONTROL OF MOBILE ROBOTS COURSE
COMPUTER SCIENCE AND ENGINEERING

Giuseppe Chiari, 10576799
Leonardo Gargani, 10569221
Serena Salvi, 10607377

Supervisor:
Luca Bascetta

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Abstract: ...

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1. Introduction

...

2. DWA overview (paper version)

...

3. DWA in ROS (+ comparison with paper)

3.1. From ROS wiki

...

3.2. Comparison

...

4. Our set up

4.1. Our robot

... (differential drive, footprint, dimensions)

4.2. Our map

... (No obstacles, only global plan/map, multiple goals)

5. Implementation

5.1. Architecture overview

... (things in common between our controller and DWA: simulator, ...)

5.2. Simulator

...

5.3. Trajectory controller

...

5.4. DWA controller

...

6. Parameters tuning

...

7. Experimental Results

... (plots of the bags + plots of the comparison with the custom script)

8. Encountered problems

...

9. Usage of the code

...

10. Conclusions

...