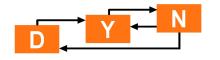
Technische Universität Dortmund Department of Biochemical and Chemical Engineering Chair of Process Dynamics and Operations Prof. Dr. Sebastian Engell



DEVELOPMENT OF LOCAL POSITIONING SYSTEM FOR A PIPE-LESS PLANT

Automation & Robotics Group Project SS18

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Abstract

Summary. Note that the abstract heading is unnumbered, it should remain so. To remove heading numbering use:

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1 Introduction

Add your name to the file name

2 Pipeless Plant

- 2.1 Existing setup
- 2.2 Problems with the Existing Setup

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- Fish eye
- $\bullet \;$ Sunlight..

3 Selection Process

About the 4 techniques..

3.1 Triangulation

Summary

Implementation

Pro and con

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3.2 Pattern Recognition

Summary

Implementation

Pro and con

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3.3 RFID

Summary

Implementation

Pro and con

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3.4 Map-Based Localization

Summary

Implementation

Pro and con

..

example:

Col1	Col2	Col2	Col3
1	6	87837	787
2	7	78	5415
3	545	778	7507
4	545	18744	7560
5	88	788	6344

Table 1: Should be a caption

- 4 Theoretical Background
- 4.1 Radio Frequency Identification
- 4.2 Trilateration
- 4.3 Simulation
- 4.4 ...

5 Simulation

- 6 Implementation
- 6.1 Hardware (Abdul or Stephan)
- 6.2 Communication (Abdul and/or Stefan)
- 6.3 Initialization procedure (Stephan and Stefan)
- 6.3.1 Recording and filtering data (Stefan)
- 6.3.2 Analysing data (Stefan)
- 6.3.3 Estimation of position and orientation (Stephan)
- 6.4 Results
- 6.5 Improvements

7 Conclusion

conclude..

8 Future Work

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9 References

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10 Appendixes