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# Acknowledgement

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# Abstract

This Thesis deals with…

# Kurzfassung

Die vorliegende Diplomarbeit befasst sich mit…

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# Abbreviations

A Abbreviation

# Symbols

Coordinatesystems

*g* Origin of global coordinate system

Parameters und constants

*i* Imaginary unit

Variables

*x* Position in x-direction

Vectors

**X***1* State vector

Matrices

**A** Transition Matrix

# Introduction

## Section 1

Figure 1 shows … as described in (2). It is obvious that, …

##

Figure.: Benz Patent Motorwagen (1)

## Example for citations

* Book

On page 11 in (2), Mitschke defines…

* Journal article

In the Journal article of Evans et al. (3) it is…

* Inbook

Donges (4) defines…

* Conference contribution

In his conference paper of III 2009, Jansson (5) shows…

* Technical report

In the technical report of Young et al. (6) it is…

* Standard

Standard (7) defines…

* Webpages

Further Information can be accessed in (8).

## Examples for paragraphs

## Example forSubfigure

|  |  |
| --- | --- |
| (a)Picture 1 | (b)Picture 2 |
| (c)Picture 3 | (d)Picture 4 |

Figure 2.: Example for a subfigure, source: (1)

Figures (a) and (b) depict … where (c) and (d) depict…

#

# Methodology

## Section1

Vector *xk* denotes the state vector which reads

|  |  |  |
| --- | --- | --- |
|  | $x\_{k}=\left[\begin{matrix}x\_{k }&y\_{k}\end{matrix} \begin{matrix}v\_{x,k}&v\_{x,k}\end{matrix}\right]^{T}$ , | (2.1) |

Where $x\_{k}$ and $y\_{k}$ are the positions; and $v\_{x,k} v\_{y,k}$ are the velocities The state vector as defined in is ... The Relationship between the derivative of the position vector g$\dot{y}(t)$ and the generalised velocity vector $$is denoted in

|  |  |  |
| --- | --- | --- |
|  | $=T\_{ge}\left(y\right)\*e^{z}$ , |  |
|  | with$ T\_{ge}=\left[\begin{matrix}\cos(ψ)&-\sin(ψ)&0\\\sin(ψ)&\cos(ψ)&0\\0&0&0\end{matrix}\begin{matrix}0&0\\0&0\\0&0\end{matrix}\right]$ , | (.) |

where **T***ge* is the transformation matrix.

## Section 2



Figure.: Diagramm

In Figure3.: Diagramm …

# Results

## Section 1

Table 1.: Results of experiment

|  |  |  |
| --- | --- | --- |
| Time [s] | Result 1 [m] | Result 2 [m] |
| 1 | 1 | 2 |
| 2 | 3 | 4 |

# Discussion

## Section 1

# Summary

## Section 1

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# Appendix