MANIPULATION OF UNCOOPERATIVE OBJECTS IN ZERO-GRAVITY WITH MODULAR SELF-RECONFIGURABLE ROBOT

by
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Abstract

PhD theme definition: mass distribution change as a control mechanism using a robot that changes its shape i.e. a self-reconfigurable robot in the specific context of attitude and rotational motion maintenance.

Acknowledgements

write \dots

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Introduction

Write..

1.1 Section

[2]

1.1.1 Subsection

1.1.1.1 Subsubsection

Background

Write.. Glasgow Haskell Compiler (GHC). Write.. GHC.

2.1 Section

Write.. Processing Element (PE).

Write.. PEs.

Transparent filled curves 1 Gaussian Distribution $\mu = 0.5 \sigma = 0.5$ $\mu = 2.0 \sigma = 1.0$ $\mu = -1.0 \sigma = 2.0$ 0.4 0.2 -4 -2 0 2 4

Figure 2.1: Figure Caption.

2.1.1 Subsection

Case	Method#1	Method#2	Method#3
1	50	837	970
2	47	877	230
3	31	25	415
4	35	144	2356
5	45	300	556

Table 2.1: Table Caption

2.1.1.1 Subsubsection

Stability study

define the stability of the rotational motion of the obejct???

System definition and model: The system is composed of an undeformable rotating object and a modular robot made out of identical spherical modules. The robots moves and deploys itself at the surface of the object by maintianing contact at all time. As the rotational motion is the only focus of this study, the system is considered to be isolated GHC. The best way to model is to use

Write..GHC.

3.1 System modelling

Write.. PE.

Write.. PEs.

3.2 Hamiltonian Lagrange formulation

Write.. PE.

Write.. PEs.

[3, 1]

3.2.1 Subsection

3.2.1.1 Subsubsection

1

8.0

0.6

0.4

0.2

-4

Transparent filled curves Gaussian Distribution $\mu = 0.5 \ \sigma = 0.5$ $\mu = 2.0 \ \sigma = 1.0$ $\mu = -1.0 \ \sigma = 2.0$

2

4

Figure 3.1: Figure Caption.

0

-2

Case	Method#1	Method#2	Method#3
1	50	837	970
2	47	877	230
3	31	25	415
4	35	144	2356
5	45	300	556

Table 3.1: Table Caption

Design

Write..

4.1 Section

According to [2] ...

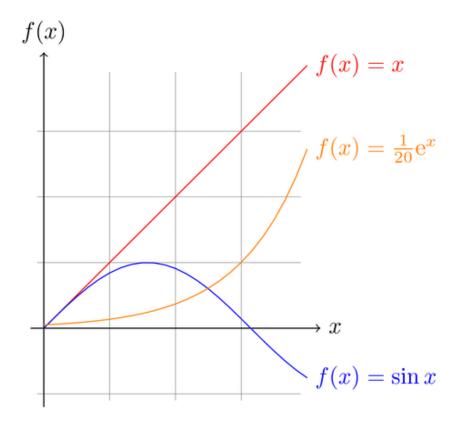


Figure 4.1: Figure Caption.

4.1.1 Subsection

Audio Name	S	um (of E	xtr	acte	d Bi	ts
Police	5	-1	5	5	-7	-5	3
Midnight	7	-3	5	3	-1	-3	5
News	9	-3	7	9	-5	-1	9

Table 4.1: Table Caption

4.1.1.1 Subsubsection

Conclusion and Future Work

Appendix A

 \mathbf{Foo}

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