

Contents

1	ABSTRACT	1
2	INTRODUCTION	1
3	PROBLEM FORMULATION	1
4	ALGORITHM\METHODOLOGY	1
5	EVALUATION	1
6	CONCLUSION AND FUTURE WORK	2
7	Reviews from Prof. Jonathan Paxman for PhD Candidacy Proposal	3
A	APPENDIX	5

1 ABSTRACT

Background: Place the question addressed in a broad context and highlight the purpose of the study.

Aim:

Approach: Methods: Describe briefly the main methods or treatments applied;

Significance:Results: Summarize the article's main findings;

Conclusion: Indicate the main conclusions or interpretations. The abstract should be an objective representation of the article, it must not contain results which are not presented and substantiated in the main text and should not exaggerate the main conclusions.

2 INTRODUCTION

Guide: *Goal: provide context and encourage reader to read the paper.*

1. *Background and motivation (1 paragraph)*
2. *Overview of the paper and contributions (1-2 paragraphs)*
3. *More details and summary of the approach*
4. *Summary of the results and conclusions.*

Overview: Q4. Why should the community care?

Related work: Q1. What did the community know before you did whatever you did?

Contribution: Q3. Why exactly did you do?

We focus on....

We propose ABC algorithm...

We prove that

We demonstrate the EFG problem through x case studies (Section 3.4). We evaluate the ... (Section 4,5).

3 PROBLEM FORMULATION

djdhdjkh

4 ALGORITHM\METHODOLOGY

Version1:

Version2:

5 EVALUATION

Simulations:

Experiments:

Discussion: Q2 & Q3

- Q2: What are the new things you learned after you did whatever you did?
- Q3: What exactly did you do?

6 CONCLUSION AND FUTURE WORK

Questions: Q4. Why should the community care?

Should do: - Overview of Q1, Q2, and Q3; plus

- What does the community still not know?

Examples: - We have introduced a method of

- Most of our effort has focused on The results of our method often contain We believe that there is significant room for improvement by applying ABC methods to the XYZ problem.

- What do we not do?

Refer to the Data Management Plan in Appendix A.

7 Reviews from Prof. Jonathan Paxman for PhD Candidacy Proposal

- Include a discussion of the motivation and advantages for rolling contact for in-hand manipulation
- Reduce the length of the discussion on modelling the kinematics of rolling motion
- Add a brief review of path planning for two general objects under nonholonomic constraints
- Simply the aims: remove specific techniques and algorithms, and describe the broad aim of the project in general terms, and in one or two sentences. Ensure that specific objectives are framed so that the aim can be achieved.
- Include a section which describes how a discretised model will be produced such that the discrete planning algorithms described can be applied. How is this discrete model to be obtained from the continuous-time models discussed?
- If optimal planning is discussed, ensure you are specific about in what sense the solution is optimal. In some cases, optimality is not required, only a satisfactory or satisficing solution in the sense of a cost function being below some bound. In such cases, sampling-based solutions (such as RRT) are appropriate.
- Please also review the writing for grammatical correctness (seek some assistance on this if needed).
- Note Robot Operating System (not Software) in Table 1.

[1], [2],[3],[4], [5]. [6]

References

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3. Chun Sheng, C. & Roth, B. *On the spatial motion of a rigid body with point contact* in *Proceedings. 1987 IEEE International Conference on Robotics and Automation* **4** (1987), 686–695.
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A APPENDIX