

CS775 Paper Abstract : Locomotion Skills for Simulated Quadrupeds

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March 20, 2014

1 Introduction

In this paper [1], the authors have tried to solve the problem of modelling various sets of motions and gaits of a quadruped. Various actions that the authors tried to simulate were simple walk, trot, pace, canter, gallop, jumps over obstacles, falls and recovery after falls, sitting, lying down, getting up.

This problem has direct applications in gaming industry, in robotics (Boston Dynamics's Wildcat [2]) and in movies (The Chronicles of Narnia). These widespread applications and trying to create a simulation that is as close to real life as possible is what that makes this problem interesting.

2 Problem Scope

Talk about the scope of the problem here.

3 Solution

Summarize the solution here - you can stretch your description to maximum to one page (both sides of a A4 sheet).

4 Important

Learn to use bibtex and how to include citations/references your document. Everybody

should at least have one reference - of the paper you are presenting. You may include more if you refer to them in your text.

The **MOST** important aspect of writing this abstract is writing it in your own words - do NOT copy verbatim from the paper.

Please write whatever you understand. You are also free to write about things in the paper that you think are interesting, difficult, not easy to understand or implement. Try to think about what you have learnt in graphics so far and place the paper in that context. [1]

References

- [1] S. Coros, A. Karpathy, B. Jones, L. Reveret, and M. van de Panne. Locomotion skills for simulated quadrupeds. *ACM Transactions on Graphics*, 30(4):59:1–59:12, July, 2011.
- [2] B. Dynamics. Introducing wildcat. Published: 2013-10-03.