Capturing, rendering and simulation for large scale grassland

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Abstract—Grass is a very import element of nature, however create and implement a large scale, realistic grassland is not that easy due to extremely high computation complexity and large amount of data needed for simulation and rendering. Common sense tells us grass blades are simple, however there are numerous kinds of grass blade in the world and it's not possible for any system to store all kinds of grass blades beforehand. Obtain grass blade with interactive camera can be an intuitive solution for this problem. We provide a method that can obtain grass blade shape with a depth camera, render large scale grass land efficiently and simulation every single grass blade with individual response on the fly.

Index Terms—Grass, Capture, Render, Simulation, GPU

Fig. 1: Test scene

1 Introduction

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mds
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2 Related Work

3 Algorithm Overview

4 Blade Capture

5

6 Conclusion

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Appendix A
Proof of the First Zonklar Equation

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Appendix B

Appendix two text goes here.

Acknowledgments

The authors would like to thank...

References

[1] H. Kopka and P. W. Daly, *A Guide to LaTeX*, 3rd ed. Harlow, England: Addison-Wesley, 1999.

Michael Shell Biography text here.

John Doe Biography text here.

Jane Doe Biography text here.