Real-time Simulation of Topology-independent Example-based Materials

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Figure 1: *Spring Training 2009, Peoria, AZ.*

Abstract

Example-based methods are a highly effective technique to create art-directable simulations of elastic objects. In this paper, we propose a novel example-based approach that allows for topology-independent examples and achieves real-time frame rates. Either of the two issues has been addressed by previous work, but not both of them at the same time.

Keywords: radiosity, global illumination, constant time

Concepts: •**Computing methodologies** → **Image manipulation;** *Computational photography;*

1 First Section Heading

Ut sagittis arcu ut turpis sodales, nec venenatis magna efficitur. Fusce non rhoncus risus, ac tincidunt arcu. Nulla lacus odio, accumsan tempor dolor sit amet, tincidunt porttitor justo. Quisque vulputate ex ac purus ultrices tristique. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Curabitur sed ullamcorper metus. Phasellus eu purus eget leo vulputate auctor vel scelerisque velit.

Table 1: *A simple table.*

7C0	hexadecimal
3700	octal
11111000000	binary
1984	decimal

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2 Second Section Heading

Ut sagittis arcu ut turpis sodales, nec venenatis magna efficitur. Fusce non rhoncus risus, ac tincidunt arcu. Nulla lacus odio, accumsan tempor dolor sit amet, tincidunt porttitor justo. Quisque vulputate ex ac purus ultrices tristique. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Curabitur sed ullamcorper metus. Phasellus eu purus eget leo vulputate auctor vel scelerisque velit.

2.1 This is a subsection

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2.2 This is another subsection

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Figure 2: *Ferrari LaFerrari. Image courtesy Flickr user "gfreeman23."*

3 Third Section Heading

Ut sagittis arcu ut turpis sodales, nec venenatis magna efficitur. Fusce non rhoncus risus, ac tincidunt arcu. Nulla lacus odio, accumsan tempor dolor sit amet, tincidunt porttitor justo. Quisque vulputate ex ac purus ultrices tristique. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Curabitur sed ullamcorper metus. Phasellus eu purus eget leo vulputate auctor vel scelerisque velit.

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