

Deep Contact

Accelerating Rigid Simulation with Convolutional Networks

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- 1 Introduction
 - Previous Work
 - Thesis Overview
- 2 Particles-Grid-Particles
 - Grid-Particle Method
 - Smoothed Particle Hydrodynamics
 - Bilinear Interpolation
- 3 Deep Learning Model
 - CNN Architecture
 - Training Configuration
- 4 Results and Analysis

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Previous Work

- My first point.
- My second point.

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- Modeling Contact.

- Modeling Contact.
- Second item.

- Modeling Contact.
- Second item.
- Third item.

- Modeling Contact.
- Second item.
- Third item.
- Fourth item.

- Modeling Contact.
- Second item.
- Third item.
- Fourth item.
- Fifth item.

- Modeling Contact.
- Second item.
- Third item.
- Fourth item.
- Fifth item. Extra text in the fifth item.

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- It can make the simulation states be expressed by a set of matrixes, which can be accessible for deep neural networks.

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Overview of the whole workflow

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- 3 For all contacts positions, interpolated values will be generated based on label image. Then, the values will be used as starting iterate values for contact force solver. In our hypothesis, the given starting values will speed up the solver to reach convergence.

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Smoothed Particle Hydrodynamics

Fundamentals

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Bilinear Interpolation

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Block Title

You can also highlight sections of your presentation in a block, with it's own title

Theorem



There are separate environments for theorems, examples, definitions and proofs.

Example

Here is an example of an example block.

- The **first main message** of your talk in one or two lines.
- The **second main message** of your talk in one or two lines.
- Perhaps a **third message**, but not more than that.
- Outlook
 - Something you haven't solved.
 - Something else you haven't solved.

For Further Reading I

-  A. Author.
Handbook of Everything.
Some Press, 1990.
-  S. Someone.
On this and that.
Journal of This and That, 2(1):50–100, 2000.