Bullet 2.74 Physics SDK Manual



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1 Introduction

Decription of the library

Bullet Physlal open source collision detection, rigid body and soft body dynaml

Required include path: *Bullet/src*

Basic Data Types and Math Library

The basic data types, memory management and containers are located in *Bullet/src/LinearMath*.

btScalar

A *btScalar* is a posh word for a floating point number. In order to allow to compile the library in erfault,06.68 668.64

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`CProfileManager::dumpAll();` dumps a hierarchical performance output in the console. Call this after stepping the simulation.

`CProfileIterator`

4 Bullet Collision Detection

Collision Detection

The collision detection provides algorithms and acceleration structures for closest point (distance and

Collision Shapes

Bullet supports a large variety of different collision shapes, and it is possible to add your own. For best

Center of mass World Transform

The world transform of a rigid body is in Bullet always equal to its center of mass, and its basis also defines its local frame for inertia. The local inertia tense690tpandtThem

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8 Actions: Vehicles & Character Controller

Action Interface

Applying forces to a Soft body

There are methods to apply a force to each vertex (node) or at an individual node:

```
softbody ->addForce(const btVector3& forceVector);
```

```
softbody ->addForce(const btVector3& forceVector,int node);
```

Soft body constraints

It is possible to fix one or mor.5) (nodes), making it immov.5 able:

```
softbody->setMass(node,0.f);
```

or to attach one or mor.53)

```
softbody->appendAnchor(int node,btRigidr:* a rino;
```

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13 Parallelism: SPU, CUDA, OpenCL

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Contributions and people

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