



Combined static-dynamic deformations with haptic rendering

By Sedaghat, Yasaman

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | We present a real-time, physically based simulation method for animating high-resolution elastic deformations with a focus on haptic interaction. To achieve interactive rates without losing accuracy, the reduced material stiffness matrix is precomputed by removing the equations that correspond to the internal nodes of the system. In addition, we employ linear modal analysis to precompute the natural vibration modes of the system. We introduce a deformation-coupling technique in order to achieve the reduced dynamic behaviour while keeping the high-resolution local deformations. To explore the implications of the coupling system, we describe different integration techniques to time-step the reduced dynamic solution in addition to evaluating the force feedback. Moreover, we show how we handle multiple contact points for non-sticky materials. To improve the contact-handling procedure, we employ our sliding technique to include friction. We compare our proposed method to the previously existing techniques in terms of run-time complexity and deformation properties using 3D meshes embedded in finite elements. | Format: Paperback | Language/Sprache: english | 72 pp.



READ ONLINE
[4.98 MB]

Reviews

Unquestionably, this is actually the greatest function by any writer. We have go through and so i am confident that i am going to gonna read through once more once again later on. I am just happy to explain how this is actually the very best book i have got go through during my individual existence and might be he greatest ebook for ever.

-- **Wilbert Connelly**

These kinds of pdf is every thing and helped me hunting ahead plus more. It generally does not cost too much. I am delighted to tell you that this is actually the finest publication we have study in my personal life and might be he finest ebook for at any time.

-- **Dr. Veronica Hoppe**

See Also



My Best Bedtime Bible: With a Bedtime Prayer to Share

Lion Hudson Plc. Paperback. Book Condition: new. BRAND NEW, My Best Bedtime Bible: With a Bedtime Prayer to Share, Sophie Piper, Claudine Gevry, This heartwarming collection of ten Bible stories is ideal for reassuring and comforting toddlers at the end of the...



Becoming Barenaked: Leaving a Six Figure Career, Selling All of Our Crap, Pulling the Kids Out of School, and Buying an RV We Hit the Road in Search Our Own American Dream. Redefining What It Meant to Be a Family in America.

Createspace, United States, 2015. Paperback. Book Condition: New. 258 x 208 mm. Language: English . Brand New Book ***** Print on Demand *****.This isn t porn. Everyone always asks and some of our family thinks it is for sure.but its not....



Read Write Inc. Phonics: Yellow Set 5 Storybook 7 Do We Have to Keep it?

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. Tim Archbold (illustrator). 211 x 101 mm. Language: N/A. Brand New Book. These engaging Storybooks provide structured practice for children learning to read the Read Write Inc. Set 1 and 2 sounds....



Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This historic book may have numerous typos and missing text. Purchasers can usually download a free scanned copy of the...



Some of My Best Friends Are Books : Guiding Gifted Readers from Preschool to High School

Book Condition: Brand New. Book Condition: Brand New.



Summer Fit Preschool to Kindergarten Math, Reading, Writing, Language Arts Fitness, Nutrition and Values

Summer Fit Learning. Paperback. Book Condition: New. Paperback. 160 pages. Dimensions: 10.6in. x8.3in. x0.5in.Summer Fit Activity Books move summer learning beyond academics to also prepare children physically and socially for the grade ahead. Academic exercises are based on Common Core...