

# How Geometry is Changing Hollywood

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ABSTRACT

Film making is undergoing a digital revolution brought on by advances in areas such as computer technology, computational physics, and geometry. This talk will provide a behind the scenes look at how fully digital films -- such as Pixar's ``Toy Story 2'' -- are made, with particular emphasis on the role that geometry plays in the revolution. I'll use our Academy Award winning short film ``Geri's game'' as a running example, and I'll highlight the two main technical innovations behind it: the use of subdivision surfaces for geometric modeling, and the use of simulated cloth dynamics.