WOOD IMAGE GENERATION

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The goal of this research is to have a computer produce an image of a particular kind of wood. For example, if a user wants to produce an image of a wooden ball, the user can scan an actual photograph of wood into the computer and use well-known texture-mapping techniques to place that image on a ball and have the ball look fairly realistic. However, if every part of a fairly complex scene uses texture mapping, the images will occupy a large amount of space. Also, this requires the user to have a photograph of every texture that the scene requires.

Another option for rendering a scene that contains a wooden object is to have the computer generate the wood. Images are rendered on a pixel-by-pixel basis. The computer calculates the color for each pixel. So if a particular pixel should display the color of a wooden object, the computer needs to be told how to come up with that color. This research involves writing algorithms that correctly model types of wood such as oak and hickory. These algorithms should then be used to aid in calculating the color of the pixel.

ABSOLUTE: VOLUME I OF A NOVEL

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Absolute is a novella centering upon a week in the life of Matthew Palmer, a scientist who specializes in dream analysis and who is the proud inventor of the M.O.R.P.H.E.U.S device (a machine which turns a subject's dreams into three-dimensional realities). In his attempt to perfect his creation, Dr. Palmer faces a multitude of difficulties including visitations from his deceased daughter Ruth, interference and verbal threats from his living daughter Jaka, and a troubling and ultimately obsessive attraction to his test subject, an enigmatic young woman known only as “Cameron S.” (who may know more about Dr. Palmer’s hidden, haunted history of arrogance, violence and ethical carelessness than he lets on). To make matters worse, a soul-numbing nightmare haunts the scientist’s every dreaming and waking moment – the dream of slowly freezing to death in an ice box set at absolute zero.

Although Absolute is an original work, its stream-of-consciousness style owes a great debt to the novels of Virginia Woolfe and James Joyce. Further, its central meditations on the American family and the ways in which death, time and ultimately silence destroy this vital entity take their inspiration from Mark Z. Danielewski’s 2000 novel House of Leaves. The author has labored to fuse aspects of these differing modern writing styles to create an enduring work of Twenty-First Century writing.