Lormalized by Reza Ali

The visual aesthetic of the work utilizes particles moving in a Lorenz attractor field

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Lormalized is a real-time algorithmic artwork that utilizes concepts from mathematics, musical composition, interactivity and dimensionality to create an audio-visual experience that explores how algorithmic art can be composed using a familiar musical score-like methodology. The algorithmic composition of the piece utilizes a score to place notes or symbols on.

The notes in the score are used to trigger synthetically created sounds and change the parameters of the Lorenz attractor field. The title of the project refers to a mathematical operation (normalization; which turns a three dimensional location into a unit direction with a magnitude of one) and a Lorenz oscillator, which is a three dimensional dynamical system that exhibits chaotic flow that evolves over time in a complex, non-repeating pattern. The particle system is able to render its past locations, hence allowing the work to illustrate four dimensions.div.overlay { width:1040px; height:644px; } #imgplay { margin:88px 0px 0px 190px; } #player { background:no-repeat url('/videos/news/2010/april/reza.jpg') top center; } #splash, #player, #player embed, #player object { width:560px; height:340px; }

Reza Ali is a media artist/technologist/hybrid who is interested in everything from design to biology to art. Reza is currently a masters student in the Media Arts and Technology department at the University of California, Santa Barbara. Previously he graduated from Rensselaer Polytechnic Institute with two B.S. (One in Mechanical and Electrical Engineering, and minors in Electronic Art and Product Design).

Reza is interested in human computer interaction (interaction design), architecture/product design, software, mobile technology/hacking, generative visuals, algorithmic art, data visualization, audio-visual interactive immersive environments, new media tools for DJs/VJs/Performers, Trans-Architecture, photography, graphic design, user interfaces, electronics, 3D animation, modeling, rendering and scripting.

His end goals are to create content and interactive controllers for multimedia performance systems, to create new and fun models of interaction, to create form though algorithmic processes, to create real-time computer graphics for virtual worlds, and to explore the realm of science and mathematics to make complex phenomena understandable and intuitive.

More information at www.syedrezaali.com. Image and Video Courtesy of Reza Ali. Video Encoding: 3Dup.com