

Introduction

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To see a World in a Grain of Sand
And a Heaven in a Wild Flower,
Hold Infinity in the palm of your hand
And Eternity in an hour.

—William Blake, *Auguries of Innocence*, 1803

This year's Art Gallery is organized around the theme XYZN: Scale. The exhibition draws attention to a key critical affordance of computer-based authorship: the ability to iteratively scale our digital representations at will: in-out-up-down, back and forth, plus and minus. These core functions enable us to change size and location over time, and at different degrees of resolution.

The SIGGRAPH 2013 Art Gallery explores how artists take advantage of these capabilities in the construction of and/or the aesthetic effects created by their work. We sought projects that engage the artful transformation of these scaling techniques to explore an idea, tell a story, or create an experience in a novel and engaging way. Some of the projects featured this year, such as *Four Mountains* explore an idea at different orders of magnitude, complexity, and depth, producing aesthetically interesting objects along the way. *Visualizing Federal Spending*, for example, takes a 3D graphical approach to this notion, while *Water Columns* offers a physical object that expresses ambient information through a sculptural form. Other works, such as *Traces: Plankton on the Move* and *Digiti Sonus*, compare and contrast the inner resonances of seemingly disparate microcosmic and macrocosmic systems. Still others transpose sensory experiences across different affective domains, as in *Cloud Pink*, or in *Rhumb Lines*, with its eternally present waterscape. Some projects are the work of individual contributors, like the masterful *Drawing Machine*, while others, such as *Shared Skies*, are larger-scale collaborations. *This Exquisite Forest* combines constraint and openness to create an animated film. Still others, such as *Spatial Hyperlink* and *Swarm Vision*, rely on participation by gallery visitors and the conference itself to create meaning, relying on digital communication technologies to collapse space and time in order to create novel experiences.

Taken together, we feel the XYZN: Scale gallery helps realize Blake's expansive poetic idea for the 21st century, and for a diverse set of artists, dreamers, scientists, and visionaries.

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