The Design Machine Group invites you to two talks at the intersection of art and computation

By Joanna Berzowska, recently of the MIT Media Lab’s Tangible Media Group

Joanna Berzowska

Joanna was born in Poland has lived in Algeria, Gabon, Canada, Norway, Australia and the USA. She obtained undergraduate degrees in Pure Mathematics and in Fine Arts, and a Masters degree from the Massachusetts Institute of Technology, working on what she calls "Computational Expressionism". She has worked as a researcher with the Institute for Interactive Media at the University of Technology Sydney, Australia, and with the Tangible Media Group at the MIT Media Lab. She is currently the Director of Design for a high-tech startup.

musicBottles and other Tangible Media projects

People have developed sophisticated skills for sensing and manipulating physical environments. However, most of these skills are not employed by traditional GUIs (Graphical User Interfaces). The Tangible Media Group at the MIT Media Lab, led by Hiroshi Ishii, seeks to build upon these skills by giving physical form to digital information, seamlessly coupling the dual worlds of bits and atoms. They call this the Tangible Bits vision of HCI (Human Computer Interaction).

Guided by the Tangible Bits vision, they have designed tangible user interfaces that employ physical objects, surfaces, and spaces as tangible embodiments of digital information. One direction of research consists of foreground interactions with graspable objects and augmented surfaces, exploiting the human senses of touch and kinesthesia. A second area of interest comprises background information displays which use "ambient media"—ambient light, sound, airflow, and water movement—to communicate digitally mediated senses of activity and presence at the periphery of human awareness. Their goal is to change the "painted bits" of GUIs to "tangible bits," taking advantage of the richness of multimodal human senses and skills developed through our lifetime of interaction with the physical world.

Computational Expressionism: a Model for Drawing with Computation

Abstract:
This work consists of 24 Java-based drawing programs, each constructed and used by the author to create specific series of drawings. I define the "computational line" as a sophisticated drawing element controlled by various parameters of a gesture, such as speed, direction, position or order. The work questions the act of drawing in the computational medium and presents a different creative model for visual composition, one that is more iterative and evaluative. Compositions combine higher level conceptual design with real-time gestural drawing. Computational drawing is a two-fold process, at two distinct levels of interaction with the computer. The artist must program the appearance and behavior of computational lines and then draw with these by dragging a mouse or controlling another input device. The resulting aesthetic highlights the tension between repetition and variation, regularity and irregularity, mathematical order and gestural disorder.

Date: Monday, 15 May 2000
Time: 10:30-11:30
Location: Gould 208J

Date: Tuesday, 16 May 2000
Time: 3:30-4:30
Location: Gould 100