

Memory Rich Clothing : Wearable Technologies and Reactive Fashion

Title	Memory Rich Clothing
Subtitle	Wearable Technologies and Reactive Fashion
Lead-in / Abstract	<p>As designers of wearable technologies, we need to step back and ask why we want our fabrics to be electronic. What kind of information processing do we want to carry out on our bodies? What kind of functionality do we want to enable inside our clothes? The clothing and electronic industries are looking for the killer application, the next big thing that will introduce wearable computing to a mass market. However, many research directions are misguided. The focus on health monitoring and surveillance technologies clearly reflects the military funding structures and fails to deliver appealing product ideas that respond to personal, social and cultural needs.</p> <p>The killer app for wearable computing is to convey personal identity information. This is called fashion and it is mostly visual.</p> <p>I will talk about one of my research projects called Memory Rich Clothing: Garments that Display their History of Use (or Second Skins that Communicate Physical Memory). This project deals with the fact that physical objects become worn over time and carry the evidence of our identity and our history. Digital technologies allow us to shape and edit that evidence to reflect more subtle, or more poetic, aspects of our identity and our</p>

history. This work focuses on the research and development of reactive garments that display their history of use. We employ a variety of input and output methodologies to sense and display traces of physical memory on clothing. We will ask, how can an object have "memory"? How can an object be altered through interaction? What kind of interactions are appropriate to give physical memory to a wearable object? What is the difference between PASSIVE and ACTIVE interaction (manipulation versus sensing)? Who do we want to communicate with or to?

Participants and speakers

Berzowska, Joanna ("joey") (PL / CA)

Short biography of participants

Joanna Berzowska is an Assistant Professor of Design Art and Digital Image/Sound at Concordia University in Montreal. Her work and research deal primarily with "soft computation": electronic textiles, responsive clothing as wearable technology, reactive materials and squishy interfaces.

She is the cofounder of International Fashion Machines, where she developed the first electronic ink wearable animated display and Electric Plaid, an addressable color-change textile.

She received her Masters of Science from MIT for her work titled Computational Expressionism. She worked with the Tangible Media Group of the MIT Media Lab on research projects such as the musicBottles. She directed Interface Design at the Institute for Interactive Media at the University of Technology in Sydney. She holds a BA in Pure Mathematics and a BFA in Design Arts.

Her art and design work has been shown in the Cooper-Hewitt Design Museum in NYC, SIGGRAPH, Art Directors Club in NYC, Australian Museum in Sydney, NTT ICC in Tokyo and Ars Electronica Center in Linz among others. She has lectured about the intersections of art, design, technology and computation at SIGGRAPH, Banff New Media Institute in Canada and Interaction Design Institute Ivrea in Italy among others.

Full text

Please see ISEA2004 Catalogue for full text.

http://www.isea2004.net/mainframe.php?id=proc_print

Related internet addresses

<http://www.ifmachines.com/cooperhewitt.html>

<http://www.berzowska.com/lectures/isea/>

<http://hybrid.concordia.ca/~joey/research/fabric-display/index.html>