## What is the Next Generation of Human-Computer Interaction?

Sunday, April 23, 2006, at CHI 2006 in Montreal

Robert J.K. Jacob Tufts University Medford, Mass., USA

Is there an emerging next generation of human-computer interaction or simply "a thousand points of light" of disparate and unrelated new developments? This workshop will bring together researchers in a range of emerging new areas of HCI to look for common ground and a common understanding of a next generation of interfaces, after the command-line and GUI generations. Key research areas include: virtual and augmented reality; ubiquitous, pervasive, and handheld interaction; tangible interfaces; lightweight, tacit, passive, or non-command interaction; perceptual interfaces; affective computing; context-aware interfaces; ambient interfaces; embodied interfaces; sensing interfaces; and speech and multi-modal interfaces.

We seek to tie them together intellectually with unifying ideas, frameworks, and theories that provide common ground for discussing, analyzing, connecting, inventing, comparing, and making predictions about emerging new interaction styles and interface designs as well as to identify gaps or opportunities for a future research agenda from holes or "sweet spots" in a new taxonomy. To start discussion concretely, we will use the notion of reality-based interfaces, which focuses on the ways interfaces draw strength from exploiting users' pre-existing skills and expectations from the real world.

We invite computer scientists and interaction design researchers working on next generation interfaces and psychologists, cognitive scientists, and observers of HCI. Please submit a 4-page position paper about your ongoing work, new interaction designs, opinions or approaches to the problem, or conceptual frameworks or theories. Papers will be peer-reviewed and 15-20 selected by relevance and likelihood of stimulating and contributing to this discussion. Email your paper, in PDF, to jacob@cs.tufts.edu with subject "CHI 2006 Workshop Submission" by December 15, 2005.

See http://www.cs.tufts.edu/~jacob/workshop/ for more information.