Large Display Research Overview

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Abstract

As large displays become more affordable, researchers are investigating their effects on productivity, and techniques for making the large display user experience more effective. Recent work has demonstrated significant productivity benefits, but has also identified numerous usability issues with current software design not scaling well. Studies show that larger displays enable users to create and manage many more windows, as well as to engage in more complex multitasking behavior. In this overview, various usability issues, including problems around accessing windows and icons at a distance, window management, and task management, will be discussed. Several novel interaction techniques that address these issues and make users more productive across multiple sizes of displays will be explored, as will novel extensions into collaborative work and visualizations.

Keywords: Large displays, usability, visualization, user experience

Biography

Mary Czerwinski is a Research Area Manager of the VIBE (Visualization and Interaction for Business and Entertainment) group at Microsoft Research. The group is responsible for studying and designing advanced technology and interaction techniques that leverage human capabilities across a wide variety of input and output channels. Mary's primary research areas include attention, information visualization and task switching. Mary has been an affiliate assistant professor at the Department of Psychology, University of Washington since 1996. She has also held positions at Compaq Computer Corporation, Rice University. Lockheed Engineering and Corporation, and Bell Communications Research. She received a Ph.D. in cognitive psychology from Indiana University in Bloomington. Mary is active in the field of Human-Computer Interaction, publishing and participating in a wide number of conferences, professional venues and iournals.

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