

Stitching: Connecting Wireless Mobile Devices with Pen Gestures

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ABSTRACT

Stitching is a new interaction technique that allows users to combine pen-operated mobile devices with wireless networking by using pen gestures that span multiple displays. To stitch, a user starts moving the pen on one screen, crosses over the bezel, and finishes the stroke on the screen of a nearby device. Each half of the stroke is observed by a participating device, synchronized via wireless network communication, and recognized as part of a unitary gesture spanning displays, thus binding together the devices. We demonstrate a photo sharing application that uses stitching to allow users to copy images from a tablet or PDA to another device that is nearby, expand an image across multiple screens, establish a persistent shared workspace, or use one device to present images on another device. We also discuss design issues that arise from *proxemics*, that is, the sociological implications of users collaborating in close quarters.

Categories and Subject Descriptors

H.5.2 [Information Interfaces and Presentation]: Input Devices and Strategies, Interaction Styles

General Terms

Human Factors, Design

Keywords

pen computing, mobile devices, co-located collaboration, proxemics, synchronous gestures, spontaneous device sharing

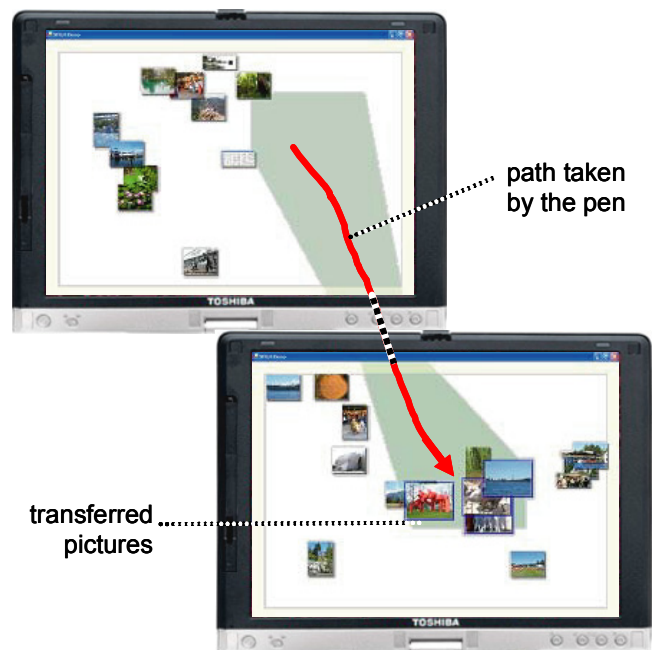


Fig. 1. Copying files by stitching from the top to bottom tablet.