Don't Touch: Social Appropriateness of Touch Sensor Placement on Interactive Lumalive E-Textile Shirts

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Abstract

In this video, we discuss the design of an e-textile shirt with an interactive Lumalive display featuring a touch-controlled image browser. To determine where to place touch sensors, we investigated which areas of the Lumalive shirt users would be comfortable touching or being touched based on how often participants would opt out of touches. For both touchers and touchees, opt-outs occurred mostly in the upper chest. On the front, the upper chest and lower abdominal zones were the least comfortable. Findings suggest participants were less comfortable with touches on the upper chest, the lower abdomen, and the lower back. We conclude that the most appropriate areas for touch sensors on a shirt are on the arms, shoulders, and upper back.

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

General Terms

Design, Human Factors