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# 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. We did so by measuring how often participants would opt out of touches. Results show significant differences in opt-outs between touch zones on the front of the shirt. For both touchers and touchees, opt-outs occurred mostly in the upper chest touch zone. We also found significant differences in comfort ratings between touch zones on the front and on the back of the shirt. On the front, the upper chest and lower abdominal zones were the least comfortable touch zones. 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 and shoulders as well as on the upper back.

**ACM Classification Keywords**

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

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