
Mobile Proxemic Awareness and Control: Exploring the Design Space for Interaction with a Single Appliance

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Abstract

Computing technologies continue to grow exponentially every day. However, appliances have become a class of technology that has remained stagnant through time. They are restricted by physical and cost limitations, while also aiming to provide with a lot of functionality. This leads to limited capabilities of input (through multiple buttons and combinations) and output (LEDs, small screens). We introduce the notion of mobile proxemic awareness and control, whereby a mobile device is used as a medium to reveal of information regarding awareness of presence, state, content and control as a function of proxemics. We explore a set of concepts that exploit different proximal distances and levels of information and controls. We illustrate the concepts with two deliberately simple prototypes: a lamp and a radio alarm clock.

Author Keywords

Proxemic interaction; control of appliances; mobile devices.

ACM Classification Keywords

H.5.2 [Information interfaces and presentation]: User Interfaces – Input devices and strategies; Prototyping.