The Design of Implicit Interactions

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The Design of Implicit Interactions
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The Design of Implicit Interactions

Wendy Ju
Stanford University and
California College of the Arts

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ABSTRACT

People rely on implicit interaction in their everyday interactions with one another to exchange queries, offers, responses, and feedback without explicit communication. A look with the eyes, a wave of the hand, the lift of the door handle—small moves can do a lot to enable joint action with elegance and economy. This work puts forward a theory that these implicit patterns of interaction with one another drive our expectations of how we should interact with devices. I introduce the Implicit Interaction Framework as a tool to map out interaction trajectories, and we use these trajectories to better understand the interactions transpiring around us. By analyzing everyday implicit interactions for patterns and tactics, designers of interactive devices can better understand how to design interactions that work or to remedy interactions that fail.

This book looks at the "smart," "automatic," and "interactive" devices that increasingly permeate our everyday lives—doors, switches, whiteboards—and provides a close reading of how we interact with them. These vignettes add to the growing body of research targeted at teasing out the factors at play in our interactions. I take a look at current research, which indicates that our reactions to interactions are social, even if the entities we are interacting with are not human. These research insights are applied to allow us to refine and improve interactive devices so that they work better in the context of our day-to-day lives. Finally this book looks to the future, and outlines considerations that need to be taken into account in prototyping and validating devices that employ implicit interaction.

KEYWORDS

machine, communication, technology, computers, interface, automation

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