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Smart-Pockets: Body-Deictic Gestures for Fast Access to Personal Data during Ambient Interactions

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Abstract

This work introduces Smart-Pockets, a new set of whole-body gesture recognition techniques that enables users to access their personal digital content efficiently for visualization on ambient displays. Smart-Pockets works by recognizing users' *body-deictic gestures* entailing access to their pockets, for which associations between specific pockets and personal digital content anchored to those pockets has been managed a priori. The "pocket metaphor" that we explore in this work enables links to digital content using physical personal containers (*i.e.*, pockets) placed at convenient locations on the user's body, containers that have been specifically devised over decades of fashion design to store and carry people's personal belongings comfortably and conveniently. Consequently, Smart-Pockets gestures are fast, require absolutely no precision to perform effectively, and are robustly recognized in user-independent scenarios with absolutely no training required from the user of the ambient display. Also, the Smart-Pockets technique is flexible

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