1. Record Nr. UNINA9910299677803321 Autore Wolf Katrin Titolo Grasp Interaction with Tablets / / by Katrin Wolf Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 3-319-13981-9 **ISBN** Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (139 p.) Collana T-Labs Series in Telecommunication Services, , 2192-2810 Disciplina 006.7 620 620.0042 621.382 Soggetti Engineering design Multimedia systems Signal processing Image processing Speech processing systems **Engineering Design** Media Design Signal, Image and Speech Processing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Introduction -- Related Work -- An Ergonomic Gesture Repertoire for Grasp-based Interaction -- Ergonomic Characteristics of Grasp-based Touch Gestures executed on two Tablet Sides -- Interaction Areas on the Front and on the Back of Tablets -- Front- and Back-of-Device Pointing with Direct Touch -- Pointing on Tablets with Grasping Hands -- Design Guidelines -- Conclusion. Sommario/riassunto This book presents guidelines for a future device type: a tablet that allows ergonomic front- and back-of-device interaction. These guidelines help designers and developers of user interfaces to build

ergonomic applications for tablet devices, in particular for devices that enable back-of-device interaction. In addition, manufacturers of tablet

devices obtain arguments that back-of-device interaction is a

promising extension of the interaction design space and results in increased input capabilities, enriched design possibilities, and proven usability. The guidelines are derived from empirical studies and developed to fit the users' skills to the way the novel device type is held. Three particular research areas that are relevant to develop design guidelines for tablet interaction are investigated: ergonomic gestures, interaction areas, and pointing techniques.