Record Nr. UNINA9910254237803321 Autore McTear Michael Titolo The Conversational Interface: Talking to Smart Devices / / by Michael McTear, Zoraida Callejas, David Griol Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 **ISBN** 3-319-32967-7 Edizione [1st ed. 2016.] 1 online resource (431 p.) Descrizione fisica 620 Disciplina Signal processing Soggetti Image processing Speech processing systems User interfaces (Computer systems) Natural language processing (Computer science) Signal, Image and Speech Processing User Interfaces and Human Computer Interaction Natural Language Processing (NLP) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Introduction -- Part 1: Conversational Interfaces: Preliminaries -- The Nota di contenuto Dawn of the Conversational Interface -- Towards a Technology of Conversation -- Conversational Interfaces: Past and Present -- Part 2: Developing a Speech-Based Conversational Interface -- Speech Input and Output -- Implementing Speech Input and Output -- Creating a Conversational Interface using Chatbot Technology -- Spoken Language Understanding -- Implementing Spoken Language Understanding -- Dialog Management -- Implementing Dialog Management -- Response Generation -- Part 3: Conversational Interfaces and Devices -- Conversational Interfaces: Devices. Wearables, Virtual Agents, and Robots -- Emotion, Affect, and Personality -- Affective Conversational Interfaces -- Implementing

Multimodal Conversational Interfaces Using Android Wear -- Part 4: Evaluation and Future Directions -- Evaluation -- Future Directions.

Sommario/riassunto

This book provides a comprehensive introduction to the conversational interface, which is becoming the main mode of interaction with virtual personal assistants, smart devices, various types of wearables, and social robots. The book consists of four parts: Part I presents the background to conversational interfaces, examining past and present work on spoken language interaction with computers; Part II covers the various technologies that are required to build a conversational interface along with practical chapters and exercises using open source tools; Part III looks at interactions with smart devices, wearables, and robots, and then goes on to discusses the role of emotion and personality in the conversational interface; Part IV examines methods for evaluating conversational interfaces and discusses future directions. · Presents a comprehensive overview of the various technologies that underlie conversational user interfaces; · Combines descriptions of conversational user interface technologies with a guide to various toolkits and software that enable readers to implement and test their own solutions; · Provides a series of worked examples so readers can develop and implement different aspects of the technologies.