Record Nr. UNINA9910144576403321 Conversational informatics [[electronic resource]]: an engineering **Titolo** approach / / edited by Toyoaki Nishida Pubbl/distr/stampa Chichester, England;; Hoboken, NJ,: Wiley, c2007 **ISBN** 1-282-34565-6 9786612345654 0-470-51247-4 0-470-51246-6 Descrizione fisica 1 online resource (433 p.) Collana Wiley series in agent technology Altri autori (Persone) NishidaT (Toyoaki) Disciplina 302.3/46 621.382 Soggetti Conversation analysis Conversation analysis - Data processing Communication models Electronic books. 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 and index. Nota di contenuto CONVERSATIONAL INFORMATICS AN ENGINEERING APPROACH; Contents; Preface; List of Contributors; 1 Introduction; 1.1 Conversation: the Most Natural Means of Communication; 1.2 An Engineering Approach to Conversation; 1.3 Towards a Breakthrough; 1.4 Approaches Used in Conversational Informatics; 1.5 Conversational Artifacts; 1.6 Conversational Content; 1.7 Conversational Environment Design; 1.8 Conversation Measurement, Analysis, and Modeling; 1.9 Underlying Methodology: References: Part I Conversational Artifacts: 2 Conversational Agents and the Construction of Humorous Acts; 2.1 Introduction 2.2 The Role of Humor in Interpersonal Interaction 2.3 Embodied Conversation Agents: 2.4 Appropriateness of Humorous Acts in Conversations: 2.5 Humorous Acts and Computational Humor: 2.6 Nonverbal Support for Humorous Acts; 2.7 Methods, Tools, Corpora,

and Future Research; 2.8 Conclusions; References; 3 Why Emotions should be Integrated into Conversational Agents; 3.1 Introduction and

Motivation; 3.2 How to Conceptualize Emotions; 3.3 Why to Integrate Emotions into Conversational Agents; 3.4 Making the Virtual Human Max Emotional; 3.5 Examples and Experiences; 3.6 Conclusions; References

4 More Than Just a Friendly Phrase: Multimodal Aspects of Polite Behavior in Agents4.1 Introduction; 4.2 The Augsburg SEMMEL Corpus; 4.3 Employing the Results for ECA Control; 4.4 Evaluating Multimodal Politeness Behavior; 4.5 Conclusions; References; 5 Attentional Behaviors as Nonverbal Communicative Signals in Situated Interactions with Conversational Agents; 5.1 Introduction; 5.2 Related Work; 5.3 Nonverbal Grounding using Attentional Behaviors Towards the Physical World; 5.4 Dialogue Management using Attentional Behaviors Towards; 5.5 Conclusions; References

6 Attentional Gestures in Dialogues Between People and Robots6.1 Introduction: 6.2 Background and Related Research: 6.3 A Conversational Robot; 6.4 Looking Behaviors for the Robot; 6.5 Nodding at the Robot; 6.6 Lessons Learned; 6.7 Future Directions; References; 7 Dialogue Context for Visual Feedback Recognition; 7.1 Introduction: 7.2 Background and Related Research: 7.3 Context for Visual Feedback; 7.4 Context from Dialogue Manager; 7.5 Framework for Context-based Gesture Recognition; 7.6 Contextual Features; 7.7 Context-based Head Gesture Recognition; 7.8 Conclusions; References 8 Trading Spaces: How Humans and Humanoids Use Speech and Gesture to Give Directions8.1 Introduction; 8.2 Words and Gestures for Giving Directions: 8.3 Relationship between Form and Meaning of Iconic Gestures in Direction-giving; 8.4 Discussion of Empirical Results; 8.5 Generating Directions with Humanoids; 8.6 Multimodal Microplanning: 8.7 Surface Realization: 8.8 Discussion of Generation Results; 8.9 Conclusions; References; 9 Facial Gestures: Taxonomy and Application of Nonverbal, Nonemotional Facial Displays for Embodied Conversational Agents; 9.1 Introduction 9.2 Facial Gestures for Embodied Conversational Agents

## Sommario/riassunto

Conversational informatics investigates human behaviour with a view to designing conversational artifacts capable of interacting with humans in a conversational fashion. It spans a broad array of topics including linguistics, psychology and human-computer interaction. Until recently research in such areas has been carried out in isolation, with no attempt made to connect the various disciplines. Advancements in science and technology have changed this. Conversational Informatics provides an interdisciplinary introduction to conversational informatics and places emphasis upon the in