

| | |
|-------------------------|--|
| 1. Record Nr. | UNINA9910299925403321 |
| Titolo | Geminoid Studies : Science and Technologies for Humanlike Teleoperated Androids // edited by Hiroshi Ishiguro, Fabio Dalla Libera |
| Pubbl/distr/stampa | Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018 |
| ISBN | 981-10-8702-4 |
| Edizione | [1st ed. 2018.] |
| Descrizione fisica | 1 online resource (462 pages) |
| Disciplina | 005.437 |
| Soggetti | Control engineering Robotics Mechatronics Vibration Dynamical systems Dynamics Artificial intelligence Signal processing Image processing Speech processing systems User interfaces (Computer systems) Control, Robotics, Mechatronics Vibration, Dynamical Systems, Control Artificial Intelligence Signal, Image and Speech Processing User Interfaces and Human Computer Interaction |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Development of an android system integrated with sensor networks -- Building artificial humans to understand humans -- Androids as a telecommunication medium with a humanlike presence -- Generating natural motion in an android by mapping human motion -- Evaluation of formant-based lip motion generation in teleoperated humanoid robots -- Analysis of head motions and speech, and head motion |

control in an android robot -- Generation of head motion during dialogue speech, and evaluation in humanoid robots -- Uncanny Valley of androids and the Lateral Inhibition Hypothesis -- Evaluation of robot appearance using a brain science technique -- Persistence of the Uncanny Valley -- Can a teleoperated android represent personal presence? - A case study with children -- Cues that trigger social transmission of disinhibition in young children -- Effects of observing eye contact between a robot and another person -- Can an android persuade you? -- Attitude change induced by different appearances of interaction agents -- Do robot appearance and speech affect people's attitude? Evaluation through the Ultimatum Game -- Isolation of physical traits and conversational content for personality design -- Body Ownership Transfer to a teleoperated android -- Effect of perspective change on Body Ownership Transfer -- Body Ownership Transfer by social interaction -- Exploring minimal requirement for Body Ownership Transfer by brain-computer interface -- Regulating emotion with Body Ownership Transfer -- Adjusting brain activity with Body Ownership Transfer -- At the café - Exploration and analysis of people's nonverbal behavior toward an android -- At the café - From an object to a subject -- At the hospital -- At the department store - can androids be a social entity in the real world? -- At the department store - can androids be salespeople in the real world? -- At the theater -- Designing robot behavior in conversations based on contemporary colloquial theatre theory -- At the theater - Possibilities of androids as poetry-reciting agents.

Sommario/riassunto

This book describes the teleoperated android Geminoid, which has a very humanlike appearance, movements, and perceptions, requiring unique developmental techniques. The book facilitates understanding of the framework of android science and how to use it in real human societies. Creating body parts of soft material by molding an existing person using a shape-memory form provides not only the humanlike texture of the body surface but also safe physical interaction, that is, humanlike interpersonal interaction between people and the android. The teleoperation also highlights novel effects in telecommunication. Operators of the Geminoid feel the robot's body as their own, and people encountering the teleoperated Geminoid perceive the robot's body as being possessed by the operator as well. Where does the feeling of human presence come from? Can we transfer or reproduce human presence by technology? Geminoid may help to answer these questions. .
