

# Human-Robot Interaction

## An Introduction

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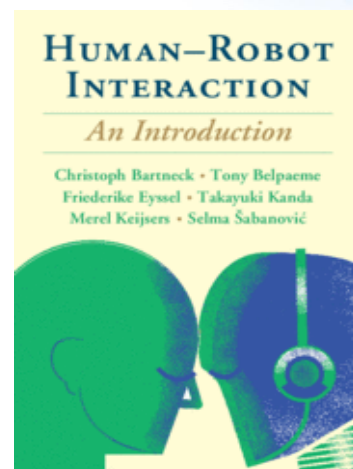
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The role of robots in society keeps expanding and diversifying, bringing with it a host of issues surrounding the relationship between robots and humans. This introduction to human-robot interaction (HRI), written by leading researchers in this developing field, is the first to provide a broad overview of the multidisciplinary topics central to modern HRI research. Students and researchers from robotics, artificial intelligence, psychology, sociology, and design will find it a concise and accessible guide to the current state of the field. Written for students from diverse backgrounds, it presents relevant background concepts, describing how robots work, how to design them, and how to evaluate their performance. Self-contained chapters discuss a wide range of topics, including the different communication modalities such as speech and language, non-verbal communication and the processing of emotions, as well as ethical issues around the application of robots today and in the context of our future society.

1. Preface; 2. What is human-robot interaction?; 3. How a robot works; 4. Design; 5. Spatial interaction; 6. Nonverbal interaction; 7. Verbal interaction; 8. Emotion; 9. Robots in the media; 10. Research methods; 11. Applications; 12. Ethical aspects; 13. The future.



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'What is human-robot interaction? This book gives questions that encourages us to think about fundamental issues on relationship between humans and robots. It will guide you to the exciting future living with robots. Worthwhile reading.'

**Hiroshi Ishiguro,**  
*Osaka University, Japan*



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