Table of Contents

Development of Brain Training Games for a Healthcare Service Robot for Older People	1
Impact of a Social Humanoid Robot as a Therapy Assistant in Children Cancer Treatment	11
Skeleton Tracking Based Complex Human Activity Recognition Using Kinect Camera	23
Prime: Towards the Design of a Small Interactive Office Robot Dante Arroyo, Cesar Lucho, Pedro Cisneros, and Francisco Cuellar	34
Group Comfortability When a Robot Approaches	44
Human Robot Interaction and Fiction: A Contradiction Eduardo Benitez Sandoval, Omar Mubin, and Mohammad Obaid	54
Robots in Older People's Homes to Improve Medication Adherence and Quality of Life: A Randomised Cross-Over Trial	64
Real-Time Gender Based Behavior System for Human-Robot Interaction	74
Activity Recognition for Natural Human Robot Interaction	84
Intuitive Robot Control with a Projected Touch Interface Lennart Claassen, Simon Aden, Johannes Gaa, Jens Kotlarski, and Tobias Ortmaier	95

A Novel Collaboratively Designed Robot to Assist Carers Lakshitha Dantanarayana, Ravindra Ranasinghe, Antony Tran, Dikai Liu, and Gamini Dissanayake	105
Social Robotics through an Anticipatory Governance Lens Lucy Diep, John-John Cabibihan, and Gregor Wolbring	115
Using Robots to Modify Demanding or Impolite Behavior of Older People	125
Ethical Dimensions of Human-Robot Interactions in the Care of Older People: Insights from 21 Focus Groups Convened in the UK, France and the Netherlands	135
Artificial Social Reasoning: Computational Mechanisms for Reasoning about Others	146
To Beep or Not to Beep Is Not the Whole Question	156
Perception of an Android Robot in Japan and Australia: A Cross-Cultural Comparison	166
Robots and the Division of Healthcare Responsibilities in the Homes of Older People	176
Investigating the Effect of a Robotic Tutor on Learner Perception of Skill Based Feedback	186
ROBOMO: Towards an Accompanying Mobile Robot	196
Sociable Dining Table: Incremental Meaning Acquisition Based on Mutual Adaptation Process	206

Table of Contents	XV
A Sociological Contribution to Understanding the Use of Robots in Schools: The Thymio Robot	217
We, Robots: Correlated Behaviour as Observed by Humans	229
An Approach to Socially Compliant Leader Following for Mobile Robots	239
Application of Fuzzy Techniques in Human-Robot Interaction - A Review	249
The Uncanny Valley: A Focus on Misaligned Cues	256
Representation and Execution of Social Plans through Human-Robot Collaboration	266
Why Industrial Robots should Become More Social: On the Design of a Natural Language Interface for an Interactive Robot Welder	276
Classical Conditioning in Social Robots	279
Social Robots in Postural Education: A New Approach to Address Body Consciousness in ASD Children	290
A Multi-modal Utility to Assist Powered Mobility Device Navigation Tasks James Poon and Jaime Valls Miro	300
Motion-Oriented Attention for a Social Gaze Robot Behavior	310
Integrating Reinforcement Learning and Declarative Programming to Learn Causal Laws in Dynamic Domains	320

XVI Table of Contents

Robot Pressure: The Impact of Robot Eye Gaze and Lifelike Bodily Movements upon Decision-Making and Trust	330
A Novel Culture-Dependent Gesture Selection System for a Humanoid Robot Performing Greeting Interaction	340
Socially Impaired Robots: Human Social Disorders and Robots' Socio-Emotional Intelligence	350
Modelling of Pneumatic Air Muscles for Direct Rotary Actuation of Hand Rehabilitation Glove	360
Using a Gaze-Cueing Paradigm to Examine Social Cognitive Mechanisms of Individuals with Autism Observing Robot and Human Faces	370
Eva Wiese, Hermann J. Müller, and Agnieszka Wykowska	
Adaptive Object Learning for Robot Carinet	380
Adaptive Control of Robotic Arm Carrying Uncertain Time-Varying Payload Based on Function Approximation Technique Norsinnira Zainul Azlan and Syarifah Nurul Syuhada Sayed Jaafar	390
Towards an Architecture for Knowledge Representation and Reasoning in Robotics	400
Shiqi Zhang, Mohan Sridharan, Michael Gelfond, and Jeremy Wyatt	
Author Index	411