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	Titolo	Context Aware Human-Robot and Human-Agent Interaction / / edited by Nadia Magnenat-Thalmann, Junsong Yuan, Daniel Thalmann, Bum-Jae You
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
	ISBN	3-319-19947-1
	Edizione	[1st ed. 2016.]
	Descrizione fisica	1 online resource (301 p.)
	Collana	Human–Computer Interaction Series, , 1571-5035
	Disciplina	629.892
	Soggetti	User interfaces (Computer systems)
		Optical data processing
		Artificial intelligence
		User Interfaces and Human Computer Interaction
		Computer Imaging, Vision, Pattern Recognition and Graphics
		Artificial Intelligence
	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 at the end of each chapters.
	Nota di contenuto	Preface -- Introduction -- Part I User Understanding through Multisensory Perception -- Face and Facial Expressions Recognition and Analysis -- Body Movement Analysis and Recognition -- Sound Source Localization and Tracking -- Modelling Conversation -- Part II Facial and Body Modelling Animation -- Personalized Body Modelling -- Parameterized Facial modelling and Animation -- Motion Based Learning -- Responsive Motion Generation -- Shared Object Manipulation -- Part III Modelling Human Behaviours -- Modelling Personality, Mood and Emotions -- Motion Control for Social Behaviours -- Multiple Virtual Humans Interactions -- Multi-Modal and Multi-Party Social Interactions.
	Sommario/riassunto	This is the first book to describe how Autonomous Virtual Humans and Social Robots can interact with real people, be aware of the environment around them, and react to various situations. Researchers from around the world present the main techniques for tracking and analysing humans and their behaviour and contemplate the potential

for these virtual humans and robots to replace or stand in for their human counterparts, tackling areas such as awareness and reactions to real world stimuli and using the same modalities as humans do: verbal and body gestures, facial expressions and gaze to aid seamless human-computer interaction (HCI). The research presented in this volume is split into three sections: ·User Understanding through Multisensory Perception: deals with the analysis and recognition of a given situation or stimuli, addressing issues of facial recognition, body gestures and sound localization. ·Facial and Body Modelling Animation: presents the methods used in modelling and animating faces and bodies to generate realistic motion. ·Modelling Human Behaviours: presents the behavioural aspects of virtual humans and social robots when interacting and reacting to real humans and each other. Context Aware Human-Robot and Human-Agent Interaction would be of great use to students, academics and industry specialists in areas like Robotics, HCI, and Computer Graphics.