



# Context Aware Human-Robot and Human-Agent Interaction

[

Magenat-Thalmann, Nadia

Yuan, Junsong

Thalmann, Daniel

You, Bum-Jae

Springer International Publishing :

Imprint: Springer,

2016

Monografía

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

<https://rebiunoda.pro.baratznet.cloud:38443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMTc1MDE2OTY>

**Título:** Context Aware Human-Robot and Human-Agent Interaction Recurso electrónico] edited by Nadia Magenat-Thalmann, Junsong Yuan, Daniel Thalmann, Bum-Jae You

**Editorial:** Cham Springer International Publishing Imprint: Springer 2016

**Descripción física:** 1 online resource (XIII, 298 p. 143 illus.) online resource

**Mención de serie:** HumanComputer Interaction Series 1571-5035

**Documento fuente:** Springer eBooks

**Contenido:** 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

**Restricciones de acceso:** Acceso restringido a usuarios UCM = For UCM patrons only

**ISBN:** 9783319199474 9783319199467 print)

**Autores:** Magnenat-Thalmann, Nadia Yuan, Junsong Thalmann, Daniel You, Bum-Jae

**Entidades:** SpringerLink (Online service)

**Enlace a formato físico adicional:** Printed edition 9783319199467

**Punto acceso adicional serie-Título:** HumanComputer Interaction Series 1571-5035

---

### **Baratz Innovación Documental**

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es