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Titolo	Handbook of virtual humans [[electronic resource] /] / edited by N. Magnenat-Thalmann, D. Thalmann
Pubbl/distr/stampa	Chichester, England ; ; Hoboken, NJ, : Wiley, c2004
ISBN	1-280-24178-0 9786610241781 0-470-02319-8 0-470-02317-1
Descrizione fisica	1 online resource (469 p.)
Altri autori (Persone)	Magnenat-ThalmannNadia <1946-> ThalmannDaniel
Disciplina	006.3 629.892
Soggetti	Robotics Artificial intelligence Virtual reality
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 (p. [400]-436) and index.
Nota di contenuto	Handbook of Virtual Humans; Contents; Preface; List of Contributors; List of Figures; List of Tables; 1 An Overview of Virtual Humans; 1.1 Why Virtual Humans?; 1.2 History of Virtual Humans; 1.2.1 Early Models; 1.2.2 Short Films and Demos; 1.2.3 The Evolution towards Real-Time; 1.3 The Applications of Virtual Humans; 1.3.1 Numerous Applications; 1.3.2 Virtual Presenters for TV and the Web; 1.3.3 Virtual Assistants for Training in Case of Emergency; 1.3.4 Virtual Ancient People in Inhabited Virtual Cultural Heritage; 1.3.5 Virtual Audience for Treatment of Social Phobia 1.3.6 Virtual Mannequins for Clothing1.3.7 Virtual Workers in Industrial Applications; 1.3.8 Virtual Actors in Computer-Generated Movies; 1.3.9 Virtual Characters in Video Games; 1.4 The Challenges in Virtual Humans; 1.4.1 A Good Representation of Faces and Bodies; 1.4.2 A Flexible Motion Control; 1.4.3 A High-Level Behavior; 1.4.4 Emotional Behavior; 1.4.5 A Realistic Appearance; 1.4.6 Interacting with the Virtual World; 1.4.7 Interacting with the Real World; 1.5 Conclusion; 2

Face Cloning and Face Motion Capture; 2.1 Introduction; 2.2 Feature-Based Facial Modeling
2.2.1 Facial Modeling Review and Analysis2.2.2 Generic Human Face Structure; 2.2.3 Photo-Cloning; 2.2.4 Feature Location and Shape Extraction; 2.2.5 Shape Modification; 2.2.6 Texture Mapping; 2.2.7 Face Cloning from Range Data; 2.2.8 Validation of the Face Cloning Results; 2.3 Facial Motion Capture; 2.3.1 Motion Capture for Facial Animation; 2.3.2 MPEG-4-Based Face Capture; 2.3.3 Generation of Static Expressions or Key-Frames; 2.3.4 Analysis of Facial Capture Data to Improve Facial Animation; 3 Body Cloning and Body Motion Capture; 3.1 Introduction; 3.2 Body Models for Fitting Purposes
3.2.1 Stick Figure3.2.2 Simple Volumetric Primitives; 3.2.3 Multi-Layered Models; 3.2.4 Anatomically Correct Models; 3.3 Static Shape Reconstruction; 3.3.1 3-D Scanners; 3.3.2 Finding Structure in Scattered 3-D Data; 3.3.3 Conforming Animatable Models to 3-D Scanned Data; 3.3.4 Photo-Based Shape Reconstruction; 3.3.5 Video-Based Shape Reconstruction; 3.4 Dynamic Motion Capture; 3.4.1 Early Motion Analysis; 3.4.2 Electro-Magnetic and Optical Motion Capture Systems; 3.4.3 Video-Based Motion Capture; 3.5 Articulated Soft Objects for Shape and Motion Estimation; 3.5.1 State Vector
3.5.2 Metaballs and Quadratic Distance Function3.5.3 Optimization Framework; 3.5.4 Implementation and Results; 3.6 Conclusion; 4 Anthropometric Body Modeling; 4.1 Introduction; 4.2 Background; 4.2.1 Anthropometry; 4.2.2 Anthropometric Human Models in CG; 4.2.3 Motivating Applications; 4.2.4 Challenging Problems; 4.3 Our Approaches to Anthropometric Models; 4.3.1 Overview; 4.3.2 Data Acquisition; 4.3.3 Pre-Processing; 4.3.4 Interpolator Construction; 4.3.5 Results and Implementation; 4.4 Conclusion; 5 Body Motion Control; 5.1 Introduction; 5.2 State of the Art in 3-D Character Animation
5.2.1 The Levels of Abstraction of the Musculo-Skeletal System

Sommario/riassunto

Virtual Humans are becoming more and more popular and used in many applications such as the entertainment industry (in both film and games) and medical applications. This comprehensive book covers all areas of this growing industry including face and body motion, body modelling, hair simulation, expressive speech simulation and facial communication, interaction with 3D objects, rendering skin and clothes and the standards for Virtual Humans. Written by a team of current and former researchers at MIRALab, University of Geneva or VRlab, EPFL, this book is the definitive guide to the area.<ul

2. Record Nr. UNINA9910704721303321

Titolo	Defense : communications : memorandum of agreement between the United States of America and the North Atlantic Treaty Organization, signed September 3 and October 28, 2007, with annexes
Pubbl/distr/stampa	[Washington, D.C.] : , : United States Department of State, , [2013?]
Descrizione fisica	1 online resource (27 unnumbered pages)
Collana	Treaties and other international acts series ; ; 07-1028
Soggetti	Military telecommunication - International cooperation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from title screen (viewed on August 15, 2013).