1. Record Nr. UNISA996465673703316 Motion in Games [[electronic resource]]: Third International **Titolo** Conference, MIG 2010, Utrecht, The Netherlands, November 14-16, 2010, Proceedings / / edited by Ronan Boulic, Yiorgos Chrysanthou, Taku Komura Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, , 2010 **ISBN** 3-642-16958-9 Edizione [1st ed. 2010.] Descrizione fisica 1 online resource (XII, 436 p. 210 illus.) Image Processing, Computer Vision, Pattern Recognition, and Graphics; Collana ; 6459 Disciplina 794.8166 Computer graphics Soggetti Computer programming Computer engineering Optical data processing Application software Artificial intelligence Computer Graphics **Programming Techniques** Computer Engineering Computer Imaging, Vision, Pattern Recognition and Graphics Information Systems Applications (incl. Internet) Artificial Intelligence Kongress 2010 Kongress. Utrecht <2010> Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references and index. Nota di bibliografia

Body Simulation -- Simulating Humans and Lower Animals -- Evaluating the Physical Realism of Character Animations Using Musculoskeletal Models -- Learning Movements -- Physically-Based Character Control in Low Dimensional Space -- Learning Crowd

Nota di contenuto

Steering Behaviors from Examples -- Body Control -- Full-Body Hybrid Motor Control for Reaching -- Pose Control in Dynamic Conditions --Spatial Awareness in Full-Body Immersive Interactions: Where Do We Stand? -- Motion Planning -- Scalable Precomputed Search Trees --Toward Simulating Realistic Pursuit-Evasion Using a Roadmap-Based Approach -- Path Planning for Groups Using Column Generation --Physically-Based Character Control -- Skills-in-a-Box: Towards Abstract Models of Motor Skills -- Angular Momentum Control in Coordinated Behaviors -- Crowds and Formation -- Simulating Formations of Non-holonomic Systems with Control Limits along Curvilinear Coordinates -- Following a Large Unpredictable Group of Targets among Obstacles -- Geometry -- Real-Time Space-Time Blending with Improved User Control -- Motion Capture for a Natural Tree in the Wind -- Active Geometry for Game Characters --Autonomous Characters -- CAROSA: A Tool for Authoring NPCs --BehaveRT: A GPU-Based Library for Autonomous Characters -- Level of Detail Al for Virtual Characters in Games and Simulation -- Navigation -- Scalable and Robust Shepherding via Deformable Shapes --Navigation Queries from Triangular Meshes -- Motion Synthesis --Motion Parameterization with Inverse Blending -- Planning and Synthesizing Superhero Motions -- Perception -- Perception Based Real-Time Dynamic Adaptation of Human Motions -- Realistic Emotional Gaze and Head Behavior Generation Based on Arousal and Dominance Factors -- Why Is the Creation of a Virtual Signer Challenging Computer Animation? -- Real-Time Graphics -- Realtime Rendering of Realistic Fabric with Alternation of Deformed Anisotropy -- Responsive Action Generation by Physically-Based Motion Retrieval and Adaptation -- Visibility Transition Planning for Dynamic Camera Control -- Posters -- The Application of MPEG-4 Compliant Animation to a Modern Games Engine and Animation Framework -- Knowledge-Based Probability Maps for Covert Pathfinding -- Modification of Crowd Behaviour Modelling under Microscopic Level in Panic Situation --Expressive Gait Synthesis Using PCA and Gaussian Modeling --Autonomous Multi-agents in Flexible Flock Formation -- Real-Time Hair Simulation with Segment-Based Head Collision -- Subgraphs Generating Algorithm for Obtaining Set of Node-Disjoint Paths in Terrain-Based Mesh Graphs -- Path-Planning for RTS Games Based on Potential Fields -- Learning Human Action Sequence Style from Video for Transfer to 3D Game Characters.

## Sommario/riassunto

This book constitutes the proceedings of the Second International Workshop on Motion in Games, held in Utrecht, The Netherlands, in November 2010. The 30 revised full papers presented together with 9 revised poster papers in this volume were carefully reviewed and selected. The papers are organized in topical sections on body simulation, learning movements, body control, motion planning, physically-based character control, crowds and formation, geometry, autonomous characters, navigation, motion synthesis, perception, real-time graphics, and posters.