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	Nota di contenuto	CGI'20 Full Papers -- Comparing Physical and Immersive VR Prototypes for Evaluation of an Industrial System User Interface -- Gaze-contingent Rendering in Virtual Reality -- Hierarchical Rendering System Based on Viewpoint Prediction in Virtual Reality -- Reinforcement Learning-Based Redirection Controller for Efficient Redirected Walking in Virtual Maze Environment -- Locality-Aware Skinning Decomposition Using Model-Dependent Mesh Clustering -- A New Volume-based Convexity Measure for 3D Shapes -- Deep Inverse Rendering for Practical Object Appearance Scan with Uncalibrated Illumination -- Application of the transfer matrix method to anti-reflective coating rendering -- Dynamic Shadow Rendering with Shadow Volume Optimization -- Adaptive Illumination Sampling for Direct Volume Rendering -- Musical Brush: Exploring Creativity through an AR-based Tool for Sketching Music and Drawings -- MR environments constructed for a large indoor physical space -- FIOU Tracker: An improved algorithm of IOU Tracker in video with a lot of background inferences -- An Approach of Short Advertising Video Generation Using Mobile Phone Assisted by Robotic Arm -- Forget the Forget Gate: Estimating Anomalies in Videos using Self-contained Long Short-Term Memory Networks -- An Improved Image stitching Method Based on Seed Region Growth and Poisson Fusion -- Illumination Harmonization with Gray Mean Scale -- An Unsupervised Approach for

3D Face Reconstruction from A Single Depth Image -- Fusing IMU Data into SfM for Image-based 3D Reconstruction -- Physics-Guided Sound Synthesis for Rotating Blades -- Elimination of Incorrect Depth Points for Depth Completion -- Pose Transfer of 2D Human Cartoon Characters -- Broad-classifier for Remote Sensing Scene Classification with Spatial and Channel-wise Attention -- GARNet: Graph Attention Residual Networks Based on Adversarial Learning for 3D Human Pose Estimation -- GPU-based Grass Simulation with Accurate Blade Reconstruction -- Flow Visualization with Density Control -- DbNet: Double-ball Model for Processing Point Clouds -- Evolving L-systems in a competitive environment -- ParaGlyder: Probe-driven Interactive Visual Analysis for Multiparametric Medical Imaging Data -- 3D Geology Scene Exploring Base on Hand-Track Somatic Interaction -- GHand: A Graph Convolution Network for 3D Hand Pose Estimation -- Bézier Curve as a Generalization of the Easing Function in Computer Animation -- Generating Orthogonal Voronoi Treemap for Visualization of Hierarchical Data -- CGI'20 Short Papers -- Preserving Temporal Consistency in Videos Through Adaptive SLIC -- Efficient non-fused Winograd on GPUs -- ENGAGE Full Papers -- Surface Fitting Using Dual Quaternion Control Points with Applications in Human Respiratory Modelling -- Deform, Cut and Tear a skinned model using Conformal Geometric Algebra -- The Forward and Inverse Kinematics of a Delta Robot -- Constrained Dynamics in Conformal and Projective Geometric Algebra -- Application of 2D PGA as an subalgebra of CRA in robotics -- Outline of tube elbow detection based on GAC -- Optimal Parenthesizing of Geometric Algebra Products -- Geometric algebra-based multilevel declassification method for geographical field data -- Homomorphic Data Concealment Powered by Clifford Geometric Algebra -- An Online Calculator for Qubits based on Geometric Algebra -- ENGAGE Short Papers -- On basis-free solution to Sylvester equation in geometric algebra -- Hyperwedge.

Sommario/riassunto

This book constitutes the refereed proceedings of the 37th Computer Graphics International Conference, CGI 2020, held in Geneva, Switzerland, in October 2020. The conference was held virtually. The 43 full papers presented together with 3 short papers were carefully reviewed and selected from 189 submissions. The papers address topics such as: virtual reality; rendering and textures; augmented and mixed reality; video processing; image processing; fluid simulation and control; meshes and topology; visual simulation and aesthetics; human computer interaction; computer animation; geometric computing; robotics and vision; scientific visualization; and machine learning for graphics.