1. Record Nr. UNISA996418281603316 Virtual, Augmented and Mixed Reality. Design and Interaction Titolo [[electronic resource]]: 12th International Conference, VAMR 2020. Held as Part of the 22nd HCI International Conference, HCII 2020, Copenhagen, Denmark, July 19-24, 2020, Proceedings, Part I / / edited by Jessie Y. C. Chen, Gino Fragomeni Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 3-030-49695-3 **ISBN** Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XXV, 658 p. 317 illus., 261 illus. in color.) Information Systems and Applications, incl. Internet/Web, and HCI;; Collana 12190 Disciplina 006.8 Soggetti User interfaces (Computer systems) Optical data processing Artificial intelligence Computer organization Application software User Interfaces and Human Computer Interaction Image Processing and Computer Vision Artificial Intelligence Computer Systems Organization and Communication Networks Information Systems Applications (incl. Internet) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Design and User Experience in VAMR -- Guerilla Evaluation of Truck Nota di contenuto HMI with VR -- A Mixed-reality Shop System Using Spatial Recognition to Provide Responsive Store Layout -- Mixed Mock-Up - Development of an Interactive Augmented Reality System for Assembly Planning --Interactive AR Models in Participation Processes -- Calibration of Diverse Tracking Systems to Enable Local Collaborative Mixed Reality Applications -- Contrast and Parameter Research of Augmented Reality Indoor Navigation Scheme -- Study on User-centered Usability

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Environment -- Research on a Washout Algorithm for 2-DOF Motion Platforms -- Usability of the Virtual Agent Interaction Framework --Towards a Predictive Framework for AR Receptivity -- Arms and Hands Segmentation for Egocentric Perspective based on PSPNet and Deeplab -- Virtual Scenarios for Pedestrian Research: A Matter of Complexity? -- Comparative Study Design of Multiple Coordinated Views for 2D Large High-Resolution Display with 3D Visualization using Mixed Reality Technology -- Study on Assessing User Experience of Augmented Reality Applications -- How Interaction Paradigms Affect User Experience and Perceived Interactivity in Virtual Reality Environment -- MRCAT: In Situ Prototyping of Interactive AR Environments -- Augmented Reality for City Planning -- Gestures and Haptic Interaction in VAMR -- Assessing the Role of Virtual Reality with Passive Haptics in Music Conductor Education: A Pilot Study --FingerTac – A Wearable Tactile Thimble for Mobile Haptic Augmented Reality Applications -- WikiNectVR: A Gesture-based Approach for Interacting in Virtual Reality Based on WikiNect and Gestural Writing --An Empirical Evaluation on Arm Fatigue in Free Hand Interaction and Guidelines for Designing Natural User Interfaces in VR -- Design and Validation of a Unity-Based Simulation to Investigate Gesture Based Control of Semi-Autonomous Vehicles -- Hand Gesture Recognition for Smartphone-Based Augmented Reality Applications -- User-Centric AR Sceneized Gesture Interaction Design -- Cognitive, Psychological and Health Aspects in VAMR -- Towards the Specification of an Integrated Measurement Model for Evaluating VR Cybersickness in Real Time --Cognitive Workload Monitoring in Virtual Reality based Rescue Missions with Drones -- Negative Effects Associated with HMDs in Augmented and Virtual Reality -- Mixed ock-up eets ErgoCAM: Feasibility Study for Prospective Ergonomic Evaluation of Manual Assembly Processes in Real-Time Using Augmented Reality and Markerless Posture Analysis --Fake people, real effects – The presence of virtual onlookers can impair performance and learning Fake People, Real Effects - The Presence of Virtual Onlookers can Impair Performance and Learning -- Investigating the Inuence of Optical Stimuli on the Human Decision Making Process in Dynamic VR-Environments -- A HMD-based Virtual Display Environment with Adjustable Viewing Distance for Improving Task Performance -- Comparative Analysis of Mission Planning and Execution Times between the Microsoft HoloLens and the Surface Touch Table -- Effect of Motion Cues on Simulator Sickness in a Flight Simulator -- Crew Workload Considerations in Using HUD Localizer Takeoff Guidance in Lieu of Currently Required Infrastructure --Performance, Simulator Sickness, and Immersion of a Ball-Sorting Task in Virtual and Augmented Realities -- Robots in VAMR -- The Effects of Asset Degradation on Human Trust in Swarms -- Visual Reference of Ambiguous Objects for Augmented Reality-Powered Human-Robot Communication in a Shared Workspace -- Safety in a Human Robot Interactive: Application to Haptic Perception -- Virtual Reality for Immersive Human Machine Teaming with Vehicles -- A Robotic Augmented Reality Virtual Window for Law Enforcement Operations --Enabling Situational Awareness via Augmented Reality of Autonomous Robot-Based Environmental Change Detection -- Construction of Human-Robot Cooperation Assembly Simulation System Based on Augmented Reality -- Using Augmented Reality to Better Study Human-Robot Interaction.

Sommario/riassunto

The 2 volume-set of LNCS 12190 and 12191 constitutes the refereed proceedings of the 12th International Conference on Virtual, Augmented and Mixed Reality, VAMR 2020, which was due to be held in July 2020 as part of HCI International 2020 in Copenhagen,

Denmark. The conference was held virtually due to the COVID-19 pandemic. A total of 1439 papers and 238 posters have been accepted for publication in the HCII 2020 proceedings from a total of 6326 submissions. The 71 papers included in these HCI 2020 proceedings were organized in topical sections as follows: Part I: design and user experience in VAMR; gestures and haptic interaction in VAMR; cognitive, psychological and health aspects in VAMR; robots in VAMR. Part II: VAMR for training, guidance and assistance in industry and business; learning, narrative, storytelling and cultural applications of VAMR; VAMR for health, well-being and medicine.