Record Nr. UNINA9910280950203321 **Titolo** Advances in Applied Digital Human Modeling and Simulation: Proceedings of the AHFE 2016 International Conference on Digital Human Modeling and Simulation, July 27-31, 2016, Walt Disney World®, Florida, USA / / edited by Vincent G. Duffy Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-41627-8 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (327 pages): illustrations Collana Advances in Intelligent Systems and Computing, , 2194-5357;; 481 Disciplina 005.437 Soggetti Computational intelligence User interfaces (Computer systems) Industrial engineering Production engineering Operations research **Decision making** Computational Intelligence User Interfaces and Human Computer Interaction Industrial and Production Engineering Operations Research/Decision Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Situational Awareness, Design and Computational Modeling -- Virtual Reality and Simulation -- Applied Modeling and Simulation. Sommario/riassunto This book focuses on the predictive capabilities derived from digital representation of humans in simulation or virtual environments. It reports on models that facilitate prediction of safety and performance, and describes both innovative visualization techniques as well as the underlying mathematics and science. Contributions cover a wealth of topics, including simulation tools and platforms, virtual interactive design, model optimization methods, ontologies and knowledge-based

decision support, human-computer interaction, human augmentation,

and many others. The book gives special emphasis to cutting-edge simulation applications of human system modeling and optimization, including aviation, manufacturing and service industries, automotive design, product design, healthcare, sustainability, and emergency management. Based on the AHFE 2016 International Conference on Digital Human Modeling and Simulation, held on July 27-31, 2016, in Walt Disney World®, Florida, USA, it is intended as timely survey for researchers, engineers, designers, applied mathematicians and practitioners working in the field of Human Factors and Ergonomics.