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Titolo VR, Simulations and Serious Games for Education / / edited by Yiyu Cai,

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Soggetti Computational intelligence

Educational technology

User interfaces (Computer systems)

Computer simulation Computational Intelligence Educational Technology

User Interfaces and Human Computer Interaction

Simulation and Modeling

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di contenuto Introduction -- Design Considerations of Educational Simulations and

Games -- Supporting Conceptual Change in Mechanics using a Serious

Game -- Evaluation of a Re-designed Framework for Embodied Cognition Math Games -- Building Deeper Understanding of Biological

Molecules with Augmented and Virtual Reality -- Study on Autism Education Through Motion Sensing Based Gaming -- Vehicle Behaviours Simulation Technology Based on Neural Network -- BlockTower: A Multi-player, and Cross-platform Competitive Social Game -- An Inquiry-based Approach for Learning System Dynamics and Modeling of the Prey-predator System -- A VR Serious Game for Special Needs Education -- Virtual & Augmented Reality Technology for

Biology Education -- Supporting Special Education Students' Internship: A VR-based Approach -- VR Enabled Learning of Independent Travelling for Special Needs Students in The Netherlands.

Sommario/riassunto This book introduces state-of-the-art research on simulation and

serious games for education. Based partially on work presented at the

3rd Asia-Europe Symposium on Simulation and Serious Games (3rd AESSSG) held in Zhuhai, China as part of the 2016 ACM SIGGRAPH International Conference on Virtual-Reality Consortium and Applications in Industry (VRACI 2016), it includes a selection of the best papers from both. The book is divided into three major domains of education applications that use simulation and serious games: science, technology, engineering and mathematics (STEM) education; special needs education; and humanity and social science education. A valuable resource for researchers and developers in simulation and serious games for education benefit from this book, it also offers educators and professionals involved in training insights into the possible applications of simulation and serious games in various areas.