Record Nr.	UNINA9910373908903321
Titolo	Biomedical Visualisation : Volume 4 / / edited by Paul M. Rea
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-24281-1
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (142 pages)
Collana	Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 1171
Disciplina	610.28
Soggetti	Biomedical engineering Bioinformatics Computational biology Biotechnology Enginyeria biomèdica Biomedical Engineering/Biotechnology Computer Appl. in Life Sciences Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface Assessing the Role of Screencasting and Video use in Anatomy Education Exploring the Role of xR in Visualizations for Use in Medical Education Virtual Patients in Health Professions Education Student-created online teaching resources for students Massive Open Online Courses: Current and future trends in biomedical sciences Applying geometric morphometrics to digital reconstruction and anatomical investigation Three-dimensional visualisation of skeletal cavities Recommended Workflow Methodology in the Creation of an Interactive Application for Patient's Diagnosed with Pancreatic Cancer Evaluation of Child-Friendly Augmented Reality Tool for Patient- centered Education in Radiology and Bone Reconstruction Using technology to engage the public in biomedical sciences Index.
Sommario/riassunto	This edited book explores the use of technology to enable us to visualise the life sciences in a more meaningful and engaging way. It will enable those interested in visualisation techniques to gain a better understanding of the applications that can be used in visualisation.

1.

imaging and analysis, education, engagement and training. The reader will be able to explore the utilisation of technologies from a number of fields to enable an engaging and meaningful visual representation of the biomedical sciences, with a focus in this volume related to anatomy, and clinically applied scenarios. The first five chapters examine a range of tools and technologies that can be used in anatomical, medical and bioscience education. This includes screencasting and video for anatomical education; the role of xR visualisations, virtual patients, student centred online e-resources and MOOCs and what the current and future trends in this field are. The sixth and seventh chapters examine ways to utilise technologies in digital reconstruction, visualisation and anatomical examination to enhance understanding of structures and their relations. The final three chapters detail how to use technology in engaging patients and the wider public. The first of these chapters discusses a workflow methodology that can be used to create an interactive app for patient's newly diagnosed with pancreatic cancer, and demonstrates how this can be applied to different clinical scenarios. The penultimate chapter shows how an augmented reality tool can be used to educate children about skeletal anatomy and broken bones. The final chapter highlights how technology can be used to engage the public in bioscience education.