Use of Immersive Technology in treatment of Neurodegenerative Diseases

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ABSRACT

Data analytics and Machine Learning services have opened up new avenues for software solutions. Healthcare is a complex industry; training medical providers and treating patients can often be a challenging process. Many healthcare professionals learn from existing mechanism like online resources, personal training and books. However, these methods often do not take into account and future unforeseen circumstances that a patient can exhibit. Preparing Healthcare professionals for these kinds of scenarios is extremely challenging Immersive technologies will be able to leverage predictive analysis and procedurally generate virtual simulations that healthcare professionals can use. The nature of immersive technologies will result in a better learning environment and allow users to train as long as they would like on procedurally generated simulations which are all unique to patient-specific scenarios. Currently, health care stimulation involves pre-built, scripted scenarios that users will rain on. Data used in these simulations are manually added and configured for the particular training simulation and is incapable of presenting difficult and random situations that may arise during a session. Healthcare professionals will usually train on past patient cases and gather information regarding symptoms from existing medical records. New training simulations are often created and do not offer new scenarios when diagnosing patients. This limitation does not prepare healthcare professional for various unforeseen circumstances that very often present themselves during real-world scenarios. Healthcare training will commonly involve live lectures and many frequent face-to-face appointments with the trainer. Passing one's experience onto someone else within the medical field can be extremely challenging due to how extensive the information can be. No efficient and optimized software solutions are being employed to create a more effective training session. Immersive technology provides a unique solution to treating and caring for patients with complex Neurodegenerative Diseases. Immersive technologies coupled with machine learning services may be used to procedurally generate 3D simulations for use in Virtual/ Augmented Reality Health Care

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