

# Case study using virtual rehabilitation for a patient with fear of falling due to diabetic peripheral neuropathy

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## ABSTRACT

The purpose of this case study is to report the effects of using virtual rehabilitation (VR) to facilitate improvement of gait stability and endurance in a patient recovering from diabetic neuropathy who also experienced fear of falling. Timed Up and Go (TUG) testing revealed objective improvements and the subject's gait appeared more stable and fluid. She reported increased confidence in walking and endorsed increased confidence on the Activity-specific Balance Confidence Scale (ABC). This study also establishes how VR games can be inexpensively made and tailored to specific therapy needs since games were made by undergraduate Computer Science students for credit.

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**Full papers will be published in the Conference Proceedings and will be freely available to delegates at the conference and online on September 20, 2016.**