

Augmented Reality Exposure Therapy

Project Abstract

Section 18-14

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Abstract

Introduction

A common method of therapy to treat phobias is exposure therapy where a stimulus is gradually presented to an individual to attempt to desensitize the individual. Many individuals undergo various forms of therapy that require a visit to the therapist and real/imaginary stimuli. New advances in Augmented Reality unlock the potential to create an accessible application to be used as a precursor to real stimuli, or to rid individuals of their phobias.

Background

Phobias are very common, and it is believed that at least one in ten people are affected at some time in their life. Phobias related to animals are among the most common of all where in severe cases, the phobia can be crippling to the individual. The level of symptoms that people with phobias experience varies a great deal from mild anxiety to very severe panic and terror. Avoiding situations where the individual may encounter their fear makes the individual more sensitive to those situations, and so it conditions them to fear even more.

Extensive research is being done with augmented and virtual reality to combat various phobias, yet none are readily available to consumers.

Methods

An application will be designed and developed that will desensitize specific phobias through augmented reality exposure therapy. Protocols will be developed that gradually expose the user to their phobia over several weeks. Each session will require several tasks the user must complete that vary in exposure intensity. Analytics will be gathered during and after each session, which can be tracked and viewed to determine whether the application desensitized the user from their phobia.