## Virtual Reality Research Assignment 1 THE RESEARCH QUESTION

## **Computing Pseudo Self in Virtual World**

Topic Area: Multi-sensory Experiences

Keywords: Virtual humans and (self-)avatars, Perception and cognition.

A person has two faces, one for the real world and one for themself. But with the advent of the virtual world, we can/may say a person has a third face that is for the virtual world. We may compute the actions of virtual humans or self-avatars based on the actions of the human in the real world. But Cyberspace has resulted in humans developing a pseudo self that can exhibit an exactly opposite behavior in the virtual world for example the behavior exhibited in cyber bullying. This in turn contests the computations done based on the real-world responses. A completely shy person can act outrageously bold when sitting in front of the computer. This happens because a virtual world gives humans a sense of freedom and confidence to do things which they otherwise wouldn't do in the real world.

Some research papers like Model of Illusions and Virtual Reality (Mar Gonzalez-Franco\* and Jaron Lanier, Microsoft Research, Redmond, WA, United States) take into account that complex social behaviors are reproduced exactly as is in the virtual world. Similarly, the paper on Interpersonal Distance in Immersive Virtual Environments (Jeremy N. Bailenson, Jim Blascovich, Andrew C. Beall, Jack M. Loomis) assumes virtual human controlled by humans are acting their normal self. These research work on virtual humans or self-avatars don't take into account the pseudo self of the humans controlling them.

Hence, we need to take into account the pseudo self displayed by an individual when computing the perception and cognition aspect for a virtual world.