A 360° Video-Based Virtual Reality Aid for Social-Emotional Skills for Individuals with Developmental Disabilities

Mistry, Anika (School: Scotts Valley High School)

Individuals with developmental disabilities such as Autism and Down Syndrome experience difficulties in social environments. This is due to deficits in social-emotional skills which results in an inability to recognize emotion through indicators in social settings. Deficits in social-emotional skills create complications for the individuals as they are unable to express their needs to others. To learn social emotional skills, children consult traditional therapists, but traditional therapy is not always accessible to all individuals. Traditional therapy is extremely expensive and costs about $47,000 a year, which is unaffordable for many families. Older patients also experience additional difficulties when finding a therapist because traditional therapists mostly cater to children. To allow for individuals of all ages to receive therapy in an accessible circumstance, I developed a 360 degree video-based Virtual Reality application designed to teach emotion recognition skills in a social setting. The game provides a realistic interface and practical environments allowing the user to easily apply the skills they learned through the application in their daily life. To determine the feasibility of the application I asked individuals with developmental disabilities to test my application and provide feedback. I utilized the feedback to improve further iterations of the application.

Awards Won: