



VoicingElder

Providing a therapeutic life review for older adults

Virtual reality has proved to be a valuable technique for various forms of psychotherapy. By implementing avatar-based interventions for patient-centered therapy, therapists have had success in treating mental health issues such as anxiety and depression. Older adults who experience these mental health issues have had unique experiences and needs that need to be addressed for treatment to be effective. One method of treating these older adults is through a life review, a purposeful and constructive effort to evaluate one's life and gain further perspective. Life review sessions are performed at most senior assisted living facilities and are able to help facilitate emotional release for terminally ill patients, as well as treat those suffering from depression, anxiety and PTSD. This developed technology is a virtual reality platform that is able to further enhance the life review experience for these individuals.

The technology

VoicingElder is a reminiscence storytelling platform for older adults that uses virtual avatars to provide an interactive and immersive life review experience. Using cameras, microphones, and a built-in algorithm, the avatars are able to mimic the gestures and reflect the emotions of the user. Users are able to act out representations of themselves or significant others at various ages (child, teenager, adult, elder), in order to create a representation of their life history in an engaging way. In addition to the therapeutic effects provided to the user, these unique life histories can also help older adults better communicate with their family members, care givers, or even future generations.

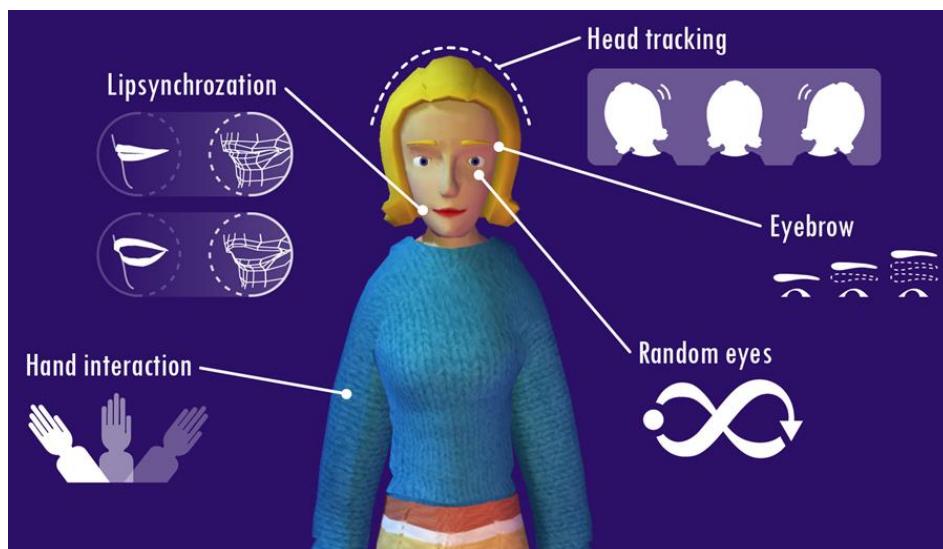


Figure 1. Avatars are able to mimic the user's gestures through cameras and use built in algorithms to mimic subtleties of human behavior such as random eye movement.

Benefits

- » Works with the user's live speech
- » Utilizes real-time motion capture to mimic the user's facial features
- » Implements random eye movement to simulate a human gaze
- » Avatars can represent different stages of aging
- » Users can switch among different avatars during speech

Applications

- » Life review
- » Therapy for treatment of mental health disorders:
 - Depression
 - Anxiety
 - PTSD

Patent status:

Patent pending: U.S. and foreign rights are available.

License status:

This technology is available for licensing to industry for further development and commercialization.

Category:

Electronic Arts

VCU Tech #:

15-040

Investigators:

Semi Ryu

Contact us about this technology

Brent Fagg, MS
Licensing Associate
bfagg@vcu.edu
(804) 827-2211