

ACM IVA 2021 GALA Submission

An Introduction to the World of Internet Memes by Curator Kate: Guiding or Accompanying Visitors?

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ABSTRACT

The embodied conversational agent Kate is the curator at our virtual museum and manages the current exhibition on internet memes focusing on image macros. To ensure all visitors understand the various images and artworks with text superimposed, Kate joins them providing background knowledge. Thereby, she either guides the visitors or accompanies them.

VIDEO DESCRIPTION

We present our Virtual-Reality-based application featuring a museum on internet memes, allowing users to gain insight into the history of internet culture independent of time and place. To support visitors during their exploration, we integrated the embodied conversational agent Kate into the immersive virtual environment. She is introduced as the museum's curator. To convey competence on the topic of internet memes, her appearance was chosen to be that of a young woman in smart casual attire. An oronasal mask, which became the social norm during the COVID-19 pandemic, minimizes the need for detailed facial animations. Kate presents the required background knowledge on the individual exhibits via natural speech. She thereby also shows personality by personal, humorous, or relatable statements.

Our contribution is showcasing two techniques of supporting a user's scene exploration. (1) Kate guides the visitor on a predefined path through the museum and ensures that she shares all information in a structured manner. (2) Kate accompanies a visitor's free exploration of the virtual space. Whenever the visitor is attracted by an exhibit, Kate provides the same information in the identical way as during the guiding. This way, users can skip exhibits they are not interested in.

For more information on the application itself, the ECA's behavioral design, as well as a small evaluation focusing on user preferences with eight participants matching Kate's age, we refer the interested reader to Bönsch et al., 2021 [1].

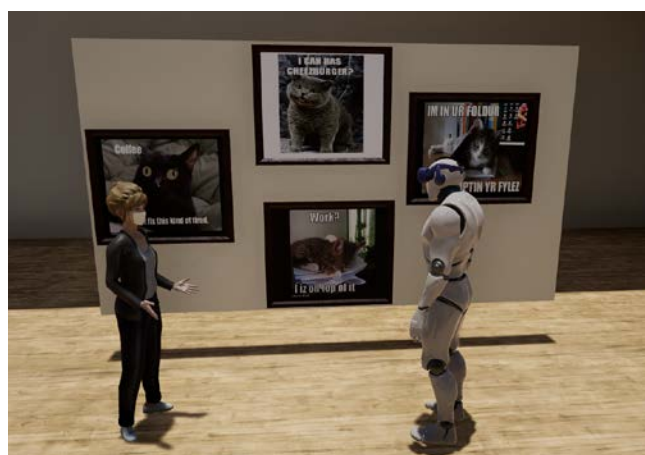


Figure 1: Curator Kate and a visitor (depicted as Unreal Mannequin) discussing lolcat memes in our virtual museum.

VIDEO INFORMATION

1. Encoding of Video: H.264
2. Format of Video: mp4
3. Resolution of Video: 1920x1080
4. Audio Included: yes
5. Encoding of Audio: AAC
6. Length of Video: 00:00:05.00 min
7. File Size: 136 MB
8. Download Link: https://youtu.be/rEc_AohvZrs

REFERENCES

- [1] A. Bönsch, D. Hashem, J. Ehret, and T. W. Kuhlen. 2021. Being Guided or Having Exploratory Freedom: User Preferences of a Virtual Agent's Behavior in a Museum. In Proc. 21th ACM Intern. Conf. on Intelligent Virtual Agents