Jesslyn Parrish Texts & Technology PhD Student, University of Central Florida

Using an Interactive Timeline to Contextualize Art History

Art museum patrons have varied reactions upon their first visit to the museum: those with an established art education and love of art can spend hours examining each piece and reading the information plaque beneath each piece. However, an average visitor spends less than ten seconds looking at each piece, and these visitors rarely leave the museum with a deeper understanding of the history living within the galleries. In this talk, I propose using an interactive 3D timeline as a way to create a new medium for visitors to interact with curated pieces as well as learn about the history of the pieces.

In this presentation I will be discussing the interactive timeline of Orlando Museum of Art's (OMA) American Journey gallery I created using Tiki-Toki. My goal in this timeline is to provide each work of art with a historical context, and curator insights in order to help visitors to have a more engaged experience in the museum. The Tiki-Toki timeline will be displayed on a webpage that visitors can access through a browser on a tablet, or a mobile device. This Digital Humanities project will provide museums with a new mode of engagement, increase visitor engagement, and provide a new means of informal learning in the OMA gallery.

Maria C. R. Harrington, Ph.D.

University of Central Florida, Games and Interactive Media Program

Immersive, Interactive, Multimodal Augmented and Virtual Reality Museums Exhibits: Making Knowledge Accessible through Authenticated Information and Story

Augmented Reality (AR) and Virtual Reality (VR) models of virtual dioramas used in museum exhibits, outdoor botanical gardens, and arboretum field trips will be presented. The current research on how such artifacts may be designed and used to achieve informal learning objectives. The immersive *AR Perpetual Garden* was developed to annotate the Carnegie Museum of Natural History's historical dioramas and real gardens to bring learning to all visitors, inside or outside the museum. The app is available for download from the Apple iTunes and Google Play stores, and an empirical study was conducted in 2019 on learning, emotional, and user experience outcomes. The VR model of *The Virtual UCF Arboretum* was developed as an immersive, interactive, multimodal, data visualization of a virtual field trip, using the Unreal Engine to represent 247 acres and ten natural plant communities representing the ecology of the real UCF Arboretum. It is integrated with the complementary AR and VR plant atlas website, currently published on *PBS Learning Media*, and usable in any classroom or home with Google Cardboard and AR, VR ready smartphones.

Videos:

http://mariacrharrington.org/virtualnature.html

Access links:

- The Virtual UCF Arboretum Project Website (Version 1.0) Launched October 2018. Available from https://arboretum.ucf.edu/virtual/
- · Also Available from PBS LearningMedia
 https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady1slaocriivxdmgBcegpcEowg5nKjz8BzBl_Txa1ow4">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady1slaocriivxdmgBcegpcEowg5nKjz8BzBl_Txa1ow4">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady1slaocriivxdmgBcegpcEowg5nKjz8BzBl_Txa1ow4">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady1slaocriivxdmgBcegpcEowg5nKjz8BzBl_Txa1ow4">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady1slaocriivxdmgBcegpcEowg5nKjz8BzBl_Txa1ow4">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady1slaocriivxdmgBcegpcEowg5nKjz8BzBl_Txa1ow4">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady1slaocriivxdmgBcegpcEowg5nKjz8BzBl_Txa1ow4">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady">https://www.pbslearningmedia.org/resource/virtual-ucf-arboretum/?fbclid="war3sur3gvnaloady">https://www.pbslearningmedia.org/resource/virtual-ucf-arb
- Apple iTunes App Store (Version 1.2) Launched October 25, 2018. Available from https://itunes.apple.com/us/app/ar-perpetual-garden/id1438086490?mt=8 and
- · Google Play Android Store (Version 6.6.6) Launched November 30, 2018. Available from https://play.google.com/store/apps/details?id=com.carnegie.garden