Canvas

2015-present

Canvas is a new application developed for Ada Asks, an upcoming video project from the Smithsonian Science Education Center to help them develop world-class digital animation videos that explain science, technology, engineering and math (STEM) concepts to young people. (View a test example here.)

Canvas allows Smithsonian science educators to rapidly create short STEM-themed videos that can be shared on the Science Education Center's website. The videos feature Ada, a Smithsonian 3-D character, who investigates various scientific questions, like what clouds can tell us about the weather.

For this effort, ICT enhanced the existing Ada character and created a standalone, user friendly, machinima authoring tool which provides a simplified method for making films using video game software. In addition, ICT integrated advanced virtual human capabilities, including the generation of nonverbal behavior. In this project the goal is for Smithsonian staffers to go from written script to posted video in 48 hours or less.

ICT also developed:
- Digital animations to choreograph Ada's movement and performance.
- Environments for setting the stories, for example, the Newsroom for breaking news stories, the Geotarium for stories about Earth and Space and the Communication Station for interviews.
- Outfits and props like lab coats, wetsuits, beakers and notebooks for additional customization.

The Smithsonian Science Education Center is expected to launch their pilot Ada Asks video project in early 2016.

Project Leader: Arno Hartholt

At the University of Southern California Institute for Creative Technologies leaders in artificial intelligence, graphics, virtual reality and narrative advance low-cost immersive techniques and technologies to solve problems facing service members, students and society.