Back to the Future: Students digitize archeological artifacts in 3-D

August 10 2012

What's (really) old is new again. Thanks to cutting-edge equipment and techniques, researchers and the public alike will soon have access to an ever-expanding database of virtual, 3-D archeological artifacts that tell the story of southern Ontario.

Working at the Museum of Ontario Archeology, 10 3-D graphics interns from Loyalist College digitized, in three-dimension, approximately 350 artifacts this summer – at a rate of nearly 100 per week. Historically, scanning a single artifact could take many hours.

By combining their skills as computer animators and visual artists with gaming-industry-standard software, a micro-CT scanner and a series of digital 3-D scanners, the interns also completed a CGI recreation and interactive walkthrough of the Lawson Prehistoric Iroquoian Village behind the museum.

These efforts will allow individuals to study and enjoy archeological artifacts virtually.

The interns worked with the Sustainable Archeology Animation Unit, which is part of the Sustainable Archeology program – a multimillion dollar partnership between Western University and McMaster University, and funded by the Canada Foundation for Innovation and the Province of Ontario. Additional funding and industry support was provided by MITACS Canada and theskonkworks.

The Sustainable Archeology program's goal is to establish a research and digital data cooperative that enables an unprecedented range and depth of archeological research.

When the program's new facility at the museum is fully operational, it will house a database of thousands of highly detailed virtual models of artifacts that can be used for research and analysis. Members of the public will also be able to browse these virtual artifacts, while exploring southern Ontario's prehistory through the village recreation and interactive environment.

Provided by University of Western Ontario