

Maptek Expertise and Software Captures Aboriginal Rock Art



Maptek expertise and software has played a key role in capturing and digitally preserving Aboriginal rock art in Kakadu National Park for the CyArk 500 challenge. The I-Site Studio software was used to create a 3D reproduction of historical Aboriginal rock art at the park in Australia's Northern Territory. The CyArk 500 challenge aims to digitally preserve 500 cultural heritage sites using 3D technology within the next 5 years.

Elizabeth Lee, vice-president at CyArk, was thrilled to be able to include the data for Kakadu in the archive. She called it an incredible site and a fantastic example of Australia's rich Aboriginal history and expressed her gratitude to Maptek for donating time and data for the project.

The rock art sites of Kakadu are recognised internationally for their cultural value, and are one of the reasons that Kakadu is inscribed on the United Nations Educational, Scientific, Cultural Organization (Unesco) list of World Heritage properties. The purpose of the project was to preserve Australian cultural and heritage-listed artefacts in a reproducible and accurate 3D format. Three locations were scanned during the one-day visit with 17 areas of art captured, each containing multiple pieces.

I-Site Studio software was chosen for its powerful modelling tools. The detailed laser scan data contained up to 74 million points. This data was modelled to create an accurate 3D representation of the environment. High-definition digital photographs were captured simultaneously to record the artwork.

The photo registration tools in I-Site Studio allow photographs from digital cameras and other sources to be projected in any orientation onto a surface. Laser intensity data from the infrared signals was used to match points in photos with points in the 3D scene. This took a 2D photo and turned it into a 3D scene.

The final results proved that the method is ideally suited for recording and reconstructing rock art.

<https://www.gim-international.com/content/news/maptek-expertise-and-software-captures-aboriginal-rock-art>
