

PRESS RELEASE

Fraunhofer 3D scanning facility tried and true even in transportation

PRESS RELEASE

December 18, 2014 || Page 1 | 4

It has been done. For the first time, CultLab3D traveled overseas and back on an aircraft for application testing. The scanning facility thus did not only stand out with its digitalization procedure but also with its mobility.

(Darmstadt/Rostock/Graz) Even a researcher can be relieved at some point. "We made it", rejoices Pedro Santos, head of the competence center "Cultural Heritage Digitization" at Fraunhofer IGD. CultLab3D made it to Las Vegas, USA and back to Darmstadt in one piece. From December 2 through 4, 2014, the heart of the globally unique 3D scanning facility was available for application testing at the Autodesk University 2014. The Fraunhofer researchers thus took another step towards the global 3D digitalization of museum artifacts.

Nowadays, goods can be transported by airplane safely and fast. "Nevertheless, there was great concern about our state-of-the-art prototype being damaged over such a long distance", says Santos. But the scanning facility survived everything well. "We are really relieved. Two years of development work have paid off."

The full mobility of the scanning facility is an important point for its future use. Due to its modular structure, it can be broken down into small parts, packaged well and transported. This makes it possible to digitally capture cultural objects anywhere in the world. In the future, CultLab3D will be able to preserve the millions of existing artifacts for future generations cost-effectively, speedily and sustainably.

In the process, the researchers of Fraunhofer IGD are relying on the industrialization and automation of the entire 3D digitalization process by means of state-of-the-art scanning and lighting technologies. The system does not only capture geometry and texture of artifacts but also their

PRESS RELEASE

optical material properties such as reflection and absorption behavior. So far, it has been very expensive and time-intensive to digitalize objects of art three-dimensionally. With CultLab3D, they may be scanned and archived in 3D within just a few minutes in the future.

PRESS RELEASE

December 18, 2014 || Page 2 | 4

About Autodesk University

Autodesk University provides users, developers and scientists with an opportunity to exchange information on the latest 2D and 3D technologies of the US software company Autodesk. In addition to its own photogrammetrical 3D reconstruction solutions, Fraunhofer IGD also connected Autodesk Recap Photo to CultLab3D.

Further information:

<http://cultlab3d.de/de.html>

<http://au.autodesk.com>

FRAUNHOFER INSTITUTE FOR COMPUTER GRAPHICS RESEARCH IGD

PRESS RELEASE



PRESS RELEASE

December 18, 2014 || Page 3 | 4

Image: The researchers of Fraunhofer IGD are setting up the heart of their scanning facility CultLab3D at Autodesk University 2014. For the overseas congress, the digitalization facility traveled by airplane for the first time. It was available there for application testing from December 2 through 4, 2014. (© Fraunhofer IGD)

PRESS RELEASE

Profile

PRESS RELEASE

December 18, 2014 || Page 4 | 4

Fraunhofer IGD is the world's leading institute for applied research in Visual Computing. Visual Computing is image- and model-based information technology and includes computer graphics, computer vision, as well as virtual and augmented reality.

In simple terms, the Fraunhofer researchers in Darmstadt, Rostock, Graz and Singapore are turning images into information and extracting information from images. In corporation with its partners, technical solutions and marketrelevant products are created.

Prototypes and integrated solutions are developed in accordance with customized requirements. In doing so, Fraunhofer IGD places users at the forefront, providing them with technical solutions to facilitate computer work and make it more efficient.

Owing to its numerous innovations, Fraunhofer IGD raises man-machine interaction to a new level. Man is able to work in a more result-oriented and effective way by means of the computer and visual-computing developments. Fraunhofer IGD has more than 200 employees. The budget amounts over 17 million euros.