University News

CULTURE

Digital Painting: How VR Research at Chemnitz University of Technology Makes Art an Experience

Starting August 12, 2021, Chemnitz will once again become a hotspot for art fans with the four-day Begehungen art festival - Thanks to VR, the Chair of Production Systems and Processes at Chemnitz University of Technology will give visitors interactive access to the work of a New York artist

open gallery

Sven Winkler, research associate at the Chair of Production Systems and Processes at Chemnitz University of Technology, has created a tangible work of art with the artist Olek thanks to VR technology. Photo: Lili Hofmann/Chemnitz University of Technology – All images …

At the Begehungen festival in Chemnitz, art meets lost places and international artists meet spaces that they can design. This year, the Begehungen festival is taking place at the old freight station Altendorf. The 18th Begehungen will take place there from August 12 to 15, 2021. One of the artists working there is the Polish-born and currently New York-based artist Agata Oleksiak – better known to connoisseurs as “Olek”.

She gained international fame through her colorful, crocheted sculptures and installations - and thus this year art also meets science. Because in the context of a cooperation with the Professorship of

Production Systems and Processes (Head: Prof. Dr. Martin Dix) at Chemnitz University of Technology, her works are not only to be seen and felt, but also experienced in 3D. For this purpose, Olek has designed a virtual reality artwork together with the researchers Christian Fuchs and Sven Winkler from Chemnitz University of Technology.

Their artwork is a kind of colored structure floating in space, crocheted and woven, created by digital painting and with the help of the Tilt Brush VR software. Thanks to the university's mobile VR system "move" , visitors can not only see the structures, but also fly through them.

Put simply, VR technology makes it possible to visualize shapes and structures - based on CAD data, for example. This creates simulations and designs for production engineering, among other applications, that give a realistic impression. "We create immediate access to Olek's world with our mobile virtual reality system moVE," explains Sven Winkler, research associate at the Chair of Production Systems and Processes. "In addition to our research work, we are also pleased to be able to show art in virtual space for once and to support the future European Capital of Culture in its cultural activities," says Christian Fuchs, also a research associate.

The collaboration with the makers of the Begehungen art festival, initiated by the chair of Ergonomics and Innovation Management, is intended to form the basis for further lighthouse projects in the coming years.