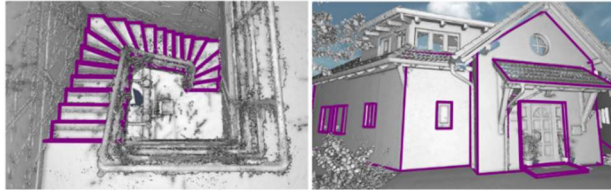


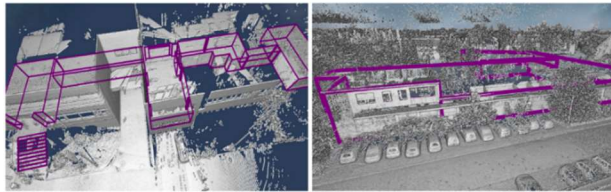
Advance AEC Partner Seminar on March 27<sup>th</sup> 4-6 pm online

## Thomas Ortner on Digital Twins living in Smart Worlds – From Reconstruction to Decision Making



(a) spiral staircase

(b) house facade



(c) office interior

(d) factory layout

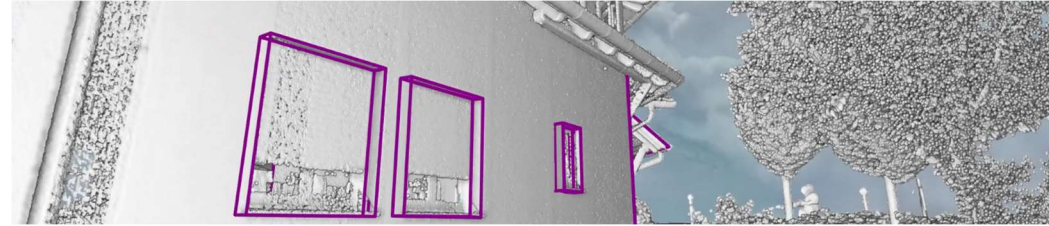


The Advance AEC partner acd *advanced computational design*

invited **Dr. Thomas Ortner**, head of the Geospatial Visualization, Semantic Modelling, and Acquisition (GeoSMAQ) research group at VRVis at TU Wien to talk about **Digital Twins living in Smart Worlds - From Reconstruction to Decision Making:**

Since the official introduction of the concept in 2014 the 'digital twin' has become a ubiquitous means to digitization in practically all domains. Starting out in space and production, covering architecture and engineering, it has gained traction in so far less digitized realms such as conventional construction sites and even forestry. This session will give an overview on how digital twins and their physical counterparts interplay and which methods (of visual computing) are necessary so digital twins can deliver on their promises, as for

instance, reduced costs, efficient use of resources, or early detection of target/actual deviations and the planning of respective interventions.



**Dr. Thomas Ortner MSc.** received his degree in 'Computer Graphics Programming' from the Faculty of Science and Engineering at the University of Hull (UK) in 2008. Thomas Ortner already worked as a software engineer and researcher at the VRVis Competence Center for Visual Computing for several years when he started his PhD at TU Wien in 2012, which he successfully completed in 2021. His PhD thesis is concerned with the combination of the two worlds of visual analytics and real-time rendering. In the past four years heading the Geospatial Visualization, Semantic Modelling, and Acquisition (GeoSMAQ) research group at VRVis he was responsible for acquiring, planning, and conducting applied research projects in a wide range of domains including surveying and mapping, tunnel surface monitoring, indoor lighting design, building energy modelling, applied robotics, and structural geology.



**Monday, 27th of March 2023, 4:00-6:00 p.m. – Advance AEC Partner Seminar**  
<https://www.advanceaec.net/>

