

Zukunft Bau

SUMMARY IN ENGLISH

Title

„Studying of options for Integration of scan-based techniques and parametric methods into a process for improving the efficiency in the planning and construction of complex facades“

German original title:

„Integration Scan-Basierter-Techniken und Parametrischer-Methoden in einen Prozess zur Verbesserung der Effizienz im Planungs- und Bauablauf komplexer Fassaden“

Abstract

The project examined if scan-based techniques (terrestrial 3d scanning and evaluation respectively) are suitable for embedding into parametric processes for planning of facades. It is a fundamental observation that, although for the individual steps of surveying and for the planning of facades digital tools exist separately, these available tools are not directly compatible with another due to the nature of their respective operating concepts.

When evaluating point clouds, the result of typically used software varies depending on the user's interaction with the graphical user interface. On the other hand, parametric planning methods use functions, which process arguments derived from previous steps in replicable manner. The need for further research in this field is to be assumed.

Eckdaten

Short title:

Scan-based techniques and parametric methods in the planning and construction of complex facades

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Third-Party-Funding:

Design To Fabrication GmbH

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Gesamtkosten: 42.500,00 €

Anteil Bundeszuschuss: 23.500,00 €

Project duration: 31.07.2017 - 30.04.2019

IMAGES:

Printable images.

Filename: „Bild_1_Kugelförmige_Ziemarkierung_Manuelle_Suche.png“

Caption: „Spherical targets with manual search“

Filename: „Bild_2_Quadratische_Schachbrettziele_Automatische_Suche.png“

Caption: „Square checkerboard targets with automatic search “

Filename: „Bild_3_Versuchsreihe_10_Perspektive über Scanner.png“

Caption: „Test series 10: Perspective from above scanner“

Filename: „Bild_4_Versuchsreihe_10_Draufsicht.png“

Caption: „Test series 10: Top view“

Filename: „Bild_5_Versuchsreihe_10_Perspektive von Scanner-Position.png“

Caption: „Test series 10: Perspective from Scanner-Position“