Precise Architectural Design under 3D Technology: A Case Study of the Changsha Ice and Snow World Project (Postprint)

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Abstract

With the continuous development of new technologies, architectural design expression has reached an unprecedented level, and the new design thinking modes and concepts it brings have provided an unprecedented promising vision for architectural aesthetic control, technological research and development, and construction methods. This paper takes the Changsha Ice and Snow World project as an example to explore three-dimensional precision design under multi-platform collaboration. A project database for building components was established, achieving virtual representation of complex architectural forms, and enabling the successful application of prefabricated building concepts to complex-form architecture.

Full Text

Preamble

This work is associated with the ChinaXiv Cooperative Journal. The text references multiple mathematical expressions, including $%&′$, $%&′"!"#$, $%&′()∗+!!""!#!$, $%&′()∗+, −"$, $cd!"#$, $$ 5o@56pq7()rst“u;vw56xy7z{:>”|} L56
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Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.