



УНИВЕРЗИТЕТ У НОВОМ САДУ  
UNIVERSITY OF NOVI SAD

## TOP ACHIEVEMENTS 2021

### FACULTY OF TECHNICAL SCIENCES

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#### First prize at the Art wall installation competition and realization of the proposed solution

ArtZept international competition in the field of design

Prof. Dr. Vesna Stojaković and Dejan Mitov

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At the ArtZept2020 competition, the participants were expected to propose design for the courtyard facade segment of the museum complex, which was later created at the Zepter Foundation building in Belgrade. The goal was to create a modern, technically feasible and durable visual solution that is original and unique. Over three hundred designs from all over the world entered the competition.

The winning solution by Vesna Stojaković and Dejan Mitov (Digital Design Center, Department of Architecture, Faculty of Technical Sciences in Novi Sad) is a representation of the vision of preserving life and nature. The main motive was to create a connection between nature and the built environment through juxtapositions that emphasize the dual nature of this balance. The image on the perforated façade represents the connection between the building and the surrounding landscape. Rectangular panels oppose curved leaf-shaped perforations arranged in symbolic p3 symmetry. Another contrast is reflected in relying on new methods of algorithmic design in contrast to the patina material.

The specificity of this solution is that the design is fully automated. Instead of digital drawing algorithmic design was used. With such an approach, the task of the designer is not to express the idea, but rather to transfer the entire design process to the digital environment, which means to create an automatic algorithm that corresponds to a specific design strategy. In the case of ArtZept facade, an original algorithm was created to automatically transform the selected image into perforations according to the given parameters that define the layout, size and shape of the opening. The advantage of this approach is that design variations are very easy to make, which further enables the analysis of a large number of solutions and the selection of an adequate visual response.



Perforated facade is a way of connecting the building and the environment. The functional and aesthetic layers are reflected in this facade design through the balance of the opposite poles. In this way, the natural landscape continues to live on the building facade through the play of light and shadow, both during the day and in the evening ambience