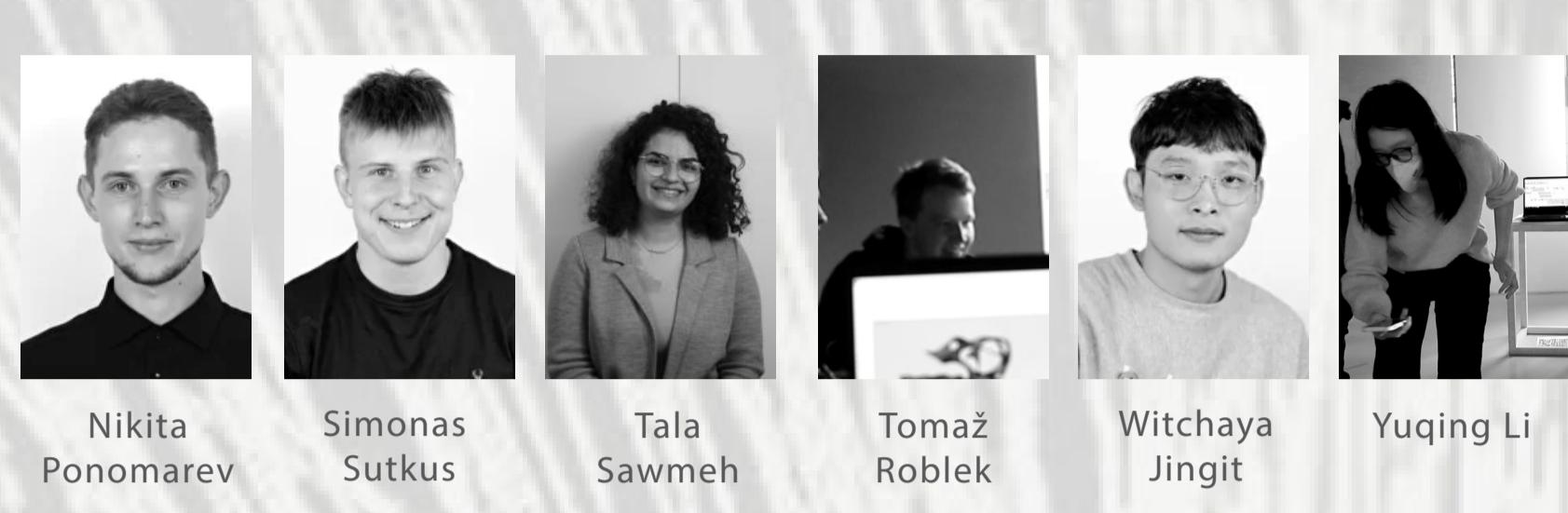
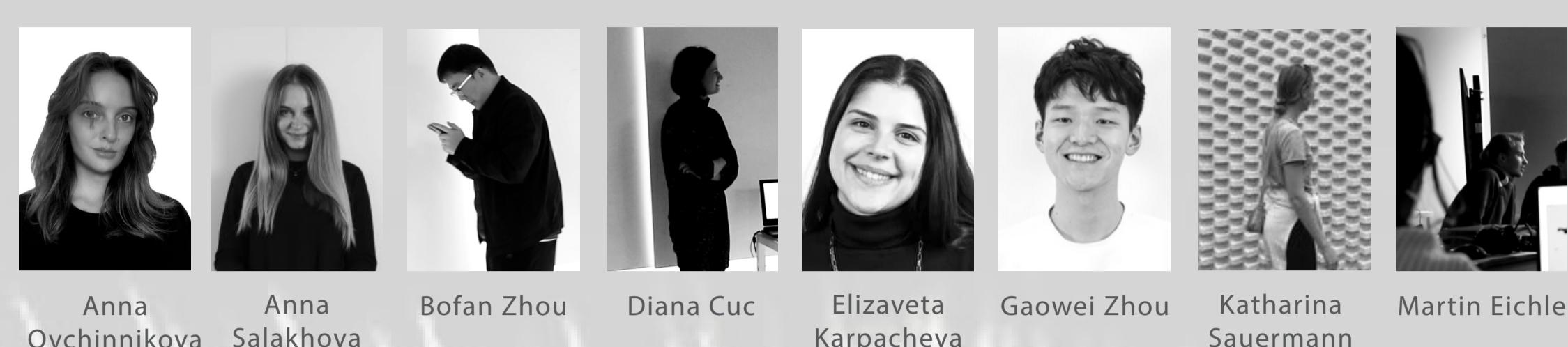
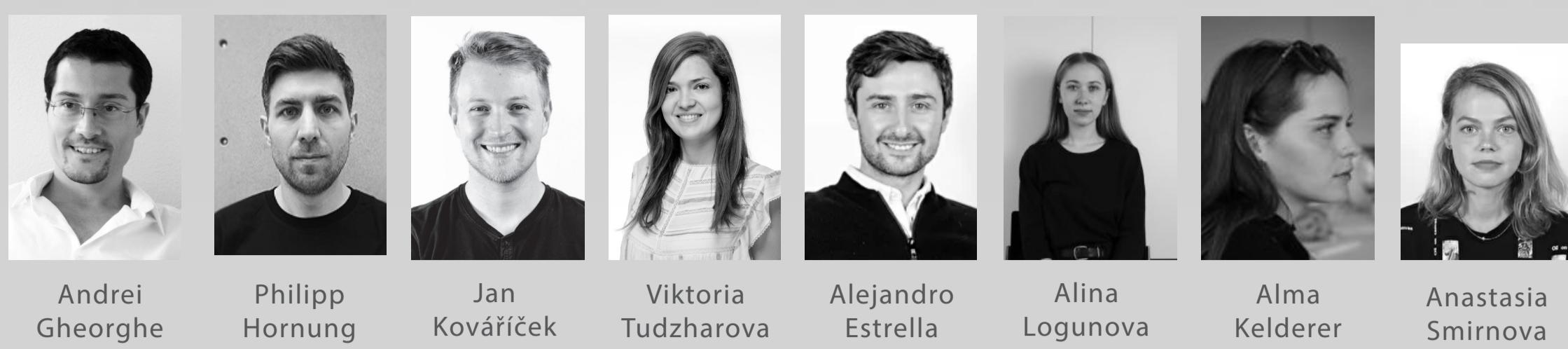


Team



Design/Build of Digital Artifacts

A seminar focused on adopting mixed reality (XR) tools for collaborative design of spatial structures.

A digital-to-physical workflow with constraint based modeling features was developed. As a result, a freeform architectural objects designed by tracking the participant's body movements were captured and structurally optimized in a live feedback loop with advanced analysis program in a virtual sandbox.

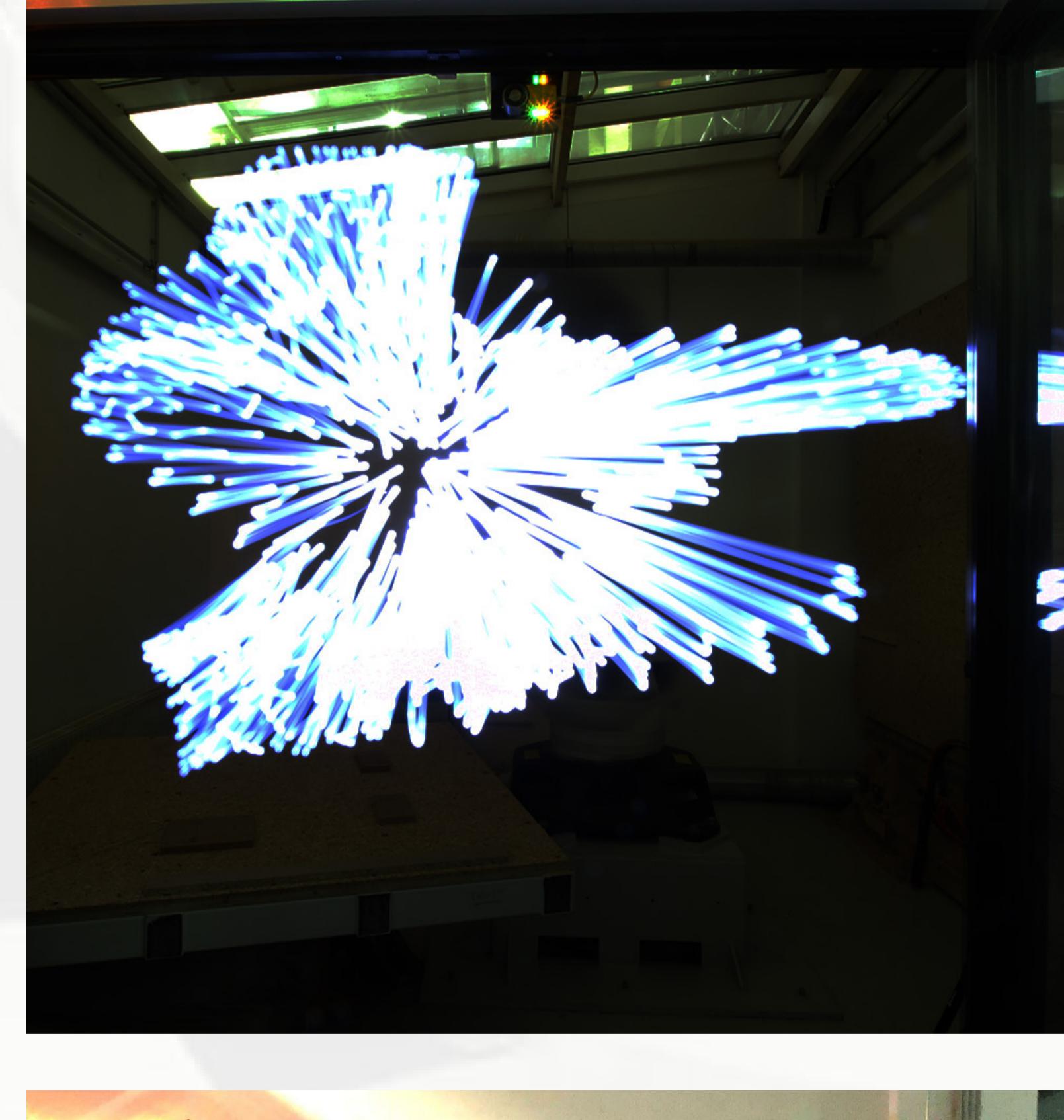
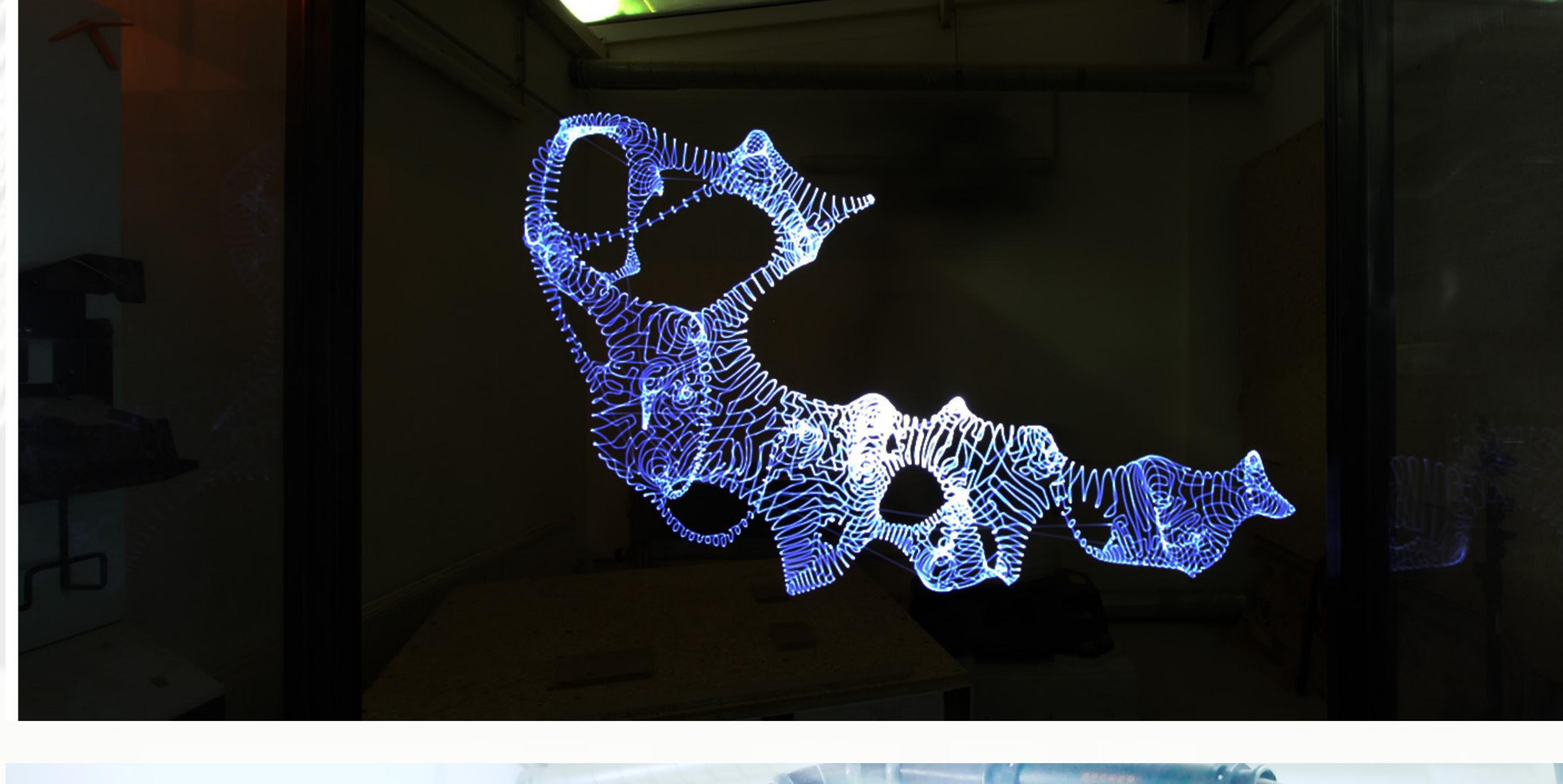
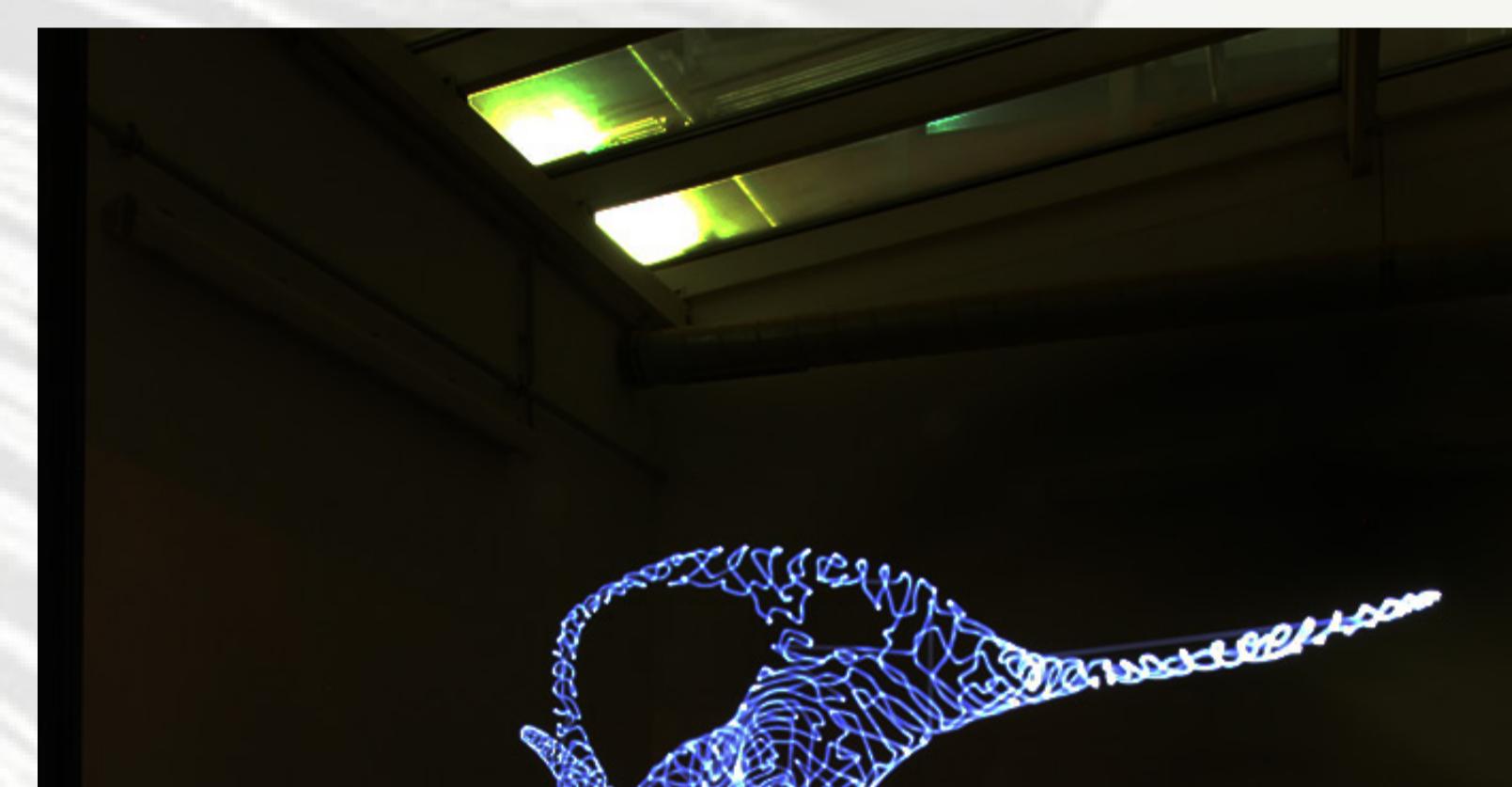
These digital sculptures were then reproduced by a KUKA robotic arm and recorded with a long exposure digital photography.

This class teaches the application of contemporary digital design and fabrication methods in applied, full-scale implementations. Student groups will generate knowhow through the analysis of reference examples, and will design parametric structures in full-scale by using easily processable materials.

The project has been conceived and realized by students in the course "Digital Design and Fullscale Fabrication", taught by Architect Andrei Gheorghe, Viktoria Tudzharova, Philipp Hornung and Jan Kováříček in the Master in Architecture programme at the Institute of Architecture, University of Applied Arts Vienna.

Project Team

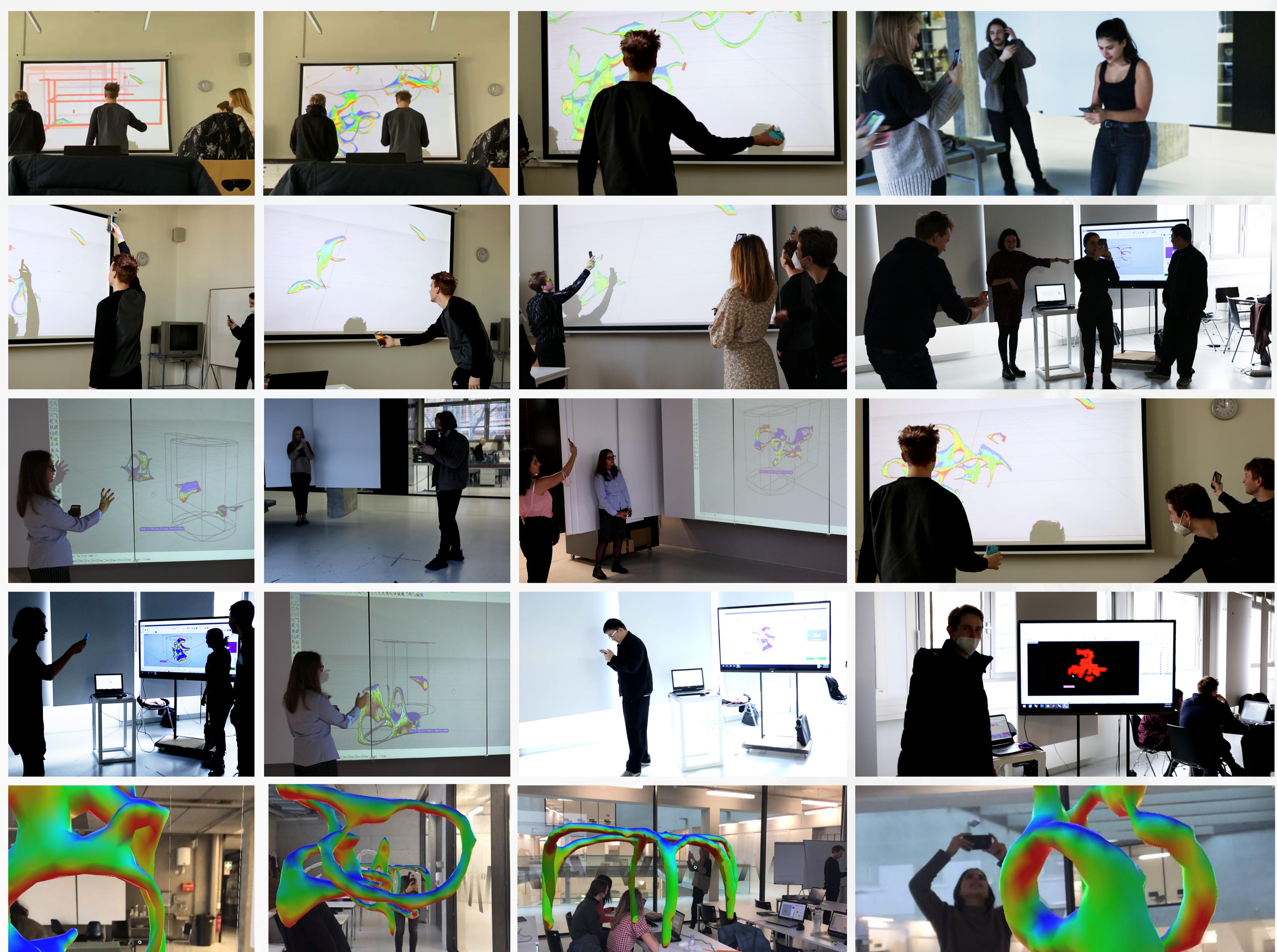
Martin Eichler, Tomaž Roblek, Alma Kelderer, Witchaya Jingit, Nikita Ponomarev, Simonas Sutkus, Anna Salakhova, Yuting Li, Anna Ovchinnikova, Alejandro Estrella, Elizaveta Karpacheva, Gaowei Zhou, Katharina Sauermann, Diana Cuc, Bofan Zhou, Alina Logunova, Arkadij Zavialov, Anastasia Smirnova, Tala Sawmeh



Computational Design Process



Design with Augmented Reality



Geometry and Production Data

