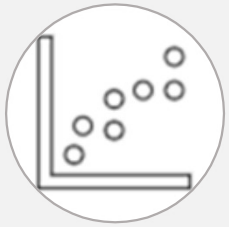
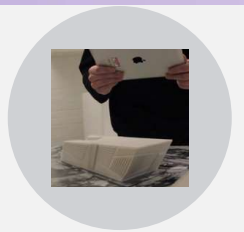
# "What is the user response to complex facades created with digital fabrication, measured through mixed reality, and how does it inform future construction trends?"

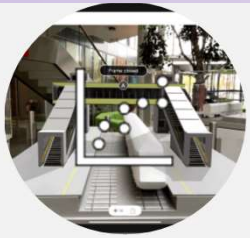
Data Driven Façade Design



Multi-objective optimization for Facade



Tangible Visualization



Immersive Simulation

VR interface eMPOWERING USER CONTROL

**VR APPLICATION FOR FAÇADE ANALYSIS**

## VR Application

- Building Manipulation
- Data visualization interface
- Optimized recommendations

## Experiment

1) Quantitative

Physical mockup model


VR interaction

2) Qualitative

Post-interaction Survey stage

Conditions:

- 1 Building, 3 façade patterns

## Stats. Analysis

1) Tolerance Analysis

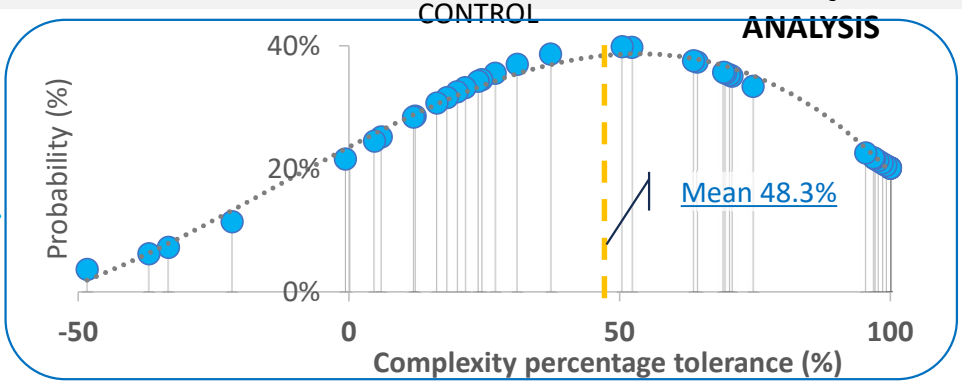

Site 1

- Screen-based answers
- VR answers
- Top recommended location

2) Survey analysis

- Participant Background
- Perception of complex
- Usability of MR, models

**Experiment Design**




**CONCLUSION:**

There is an x tolerance towards complex façade with preferred patterns following XXX shapes. How does the integration of digital fabrication in complex facades influence user tolerance and acceptance, as quantified through a mixed reality experiment, to refine understanding of complex facade design and investigate correlations between user preferences and predictions in shaping future construction trends?