Interactive Design With Augmented Reality
Sander Baas
Project manager
Innovations & projects
Innovating our Future Business
Digitalising our Current Business
Class Outline

1. Automated Conversion
2. Indoor Projects
3. Shared Models
4. Outdoor Projects
5. Interactive Holograms
6. Digital Twins

Next Steps
Personally inspired by Philip & Merel
Bringing to life projects with Augmented Reality
Process Heerlen

input | optimise | setup | export | output
---|---|---|---|---
Check Model | Undress | Set | Debug & | HoloLens
Export to FBX | Compress | Redress | Deploy | Showcase

Animated Train | Switching Views | Voice Control

AUTODESK® REVIT® | AUTODESK® 3DS MAX® | Unity | Visual Studio | Microsoft HoloLens

Royal HaskoningDHV
Engaging over 2,500 residents living nearby the station
Moving beyond by showcasing our outdoor projects
Process Waternet

**input**
- Check Model
- Export to FBX

**optimise**
- Undress
- Compress

**setup**
- Set & Scale
- Redress

**export**
- Packaging Application

**output**
- HoloLens Showcase

- **Outdoor Positioning**
- **Manual Control**
- **Anti Glare Foil**

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Royal HaskoningDHV
Comforting stakeholders and boosting decisions
Automating the process
Process Bronovo

<table>
<thead>
<tr>
<th>input</th>
<th>output</th>
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<tbody>
<tr>
<td>Check Model</td>
<td>HoloLens</td>
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<tr>
<td>Export to CMS</td>
<td>Showcase</td>
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AUTODESK® REVIT®  Microsoft HoloLens
Process Bronovo

input

Check Model
Export to CMS

output

HoloLens
Showcase

Royal HaskoningDHV

AUTODESK® FORGE

Model Derivative
AR/VR Toolkit
Animated Ambulance
Involving both clients and users in our co-creative design process.
Allowing for shared models and shared views
Process RHDHV

**input**
- Check Model
- Export to CMS

**output**
- HoloLens Showcase

**AUTODESK FORGE**

Two-point Positioning
Multiplayer Modus
Screen Sharing

Royal HaskoningDHV
Allowing for off-site involvement on the site
Interacting with holograms and co-creating solutions
Process Ede

**input**

- AUTODESK® REVIT®
- Check Model
- Export to CMS

**output**

- AUTODESK FORGE
- Cadac Modules Suite
- HoloLens Showcase

**Appendix**

- Object Library
- Move, Rotate, Scale
- Enhanced Interface
Allowing our customers to develop part of a design
Developing an Automatic Revit Sync Solution
Augmented Simulations in Bringing to life Reality
Realising Digital Twins for the Built Environment
Contact us and find out how we can support you!

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