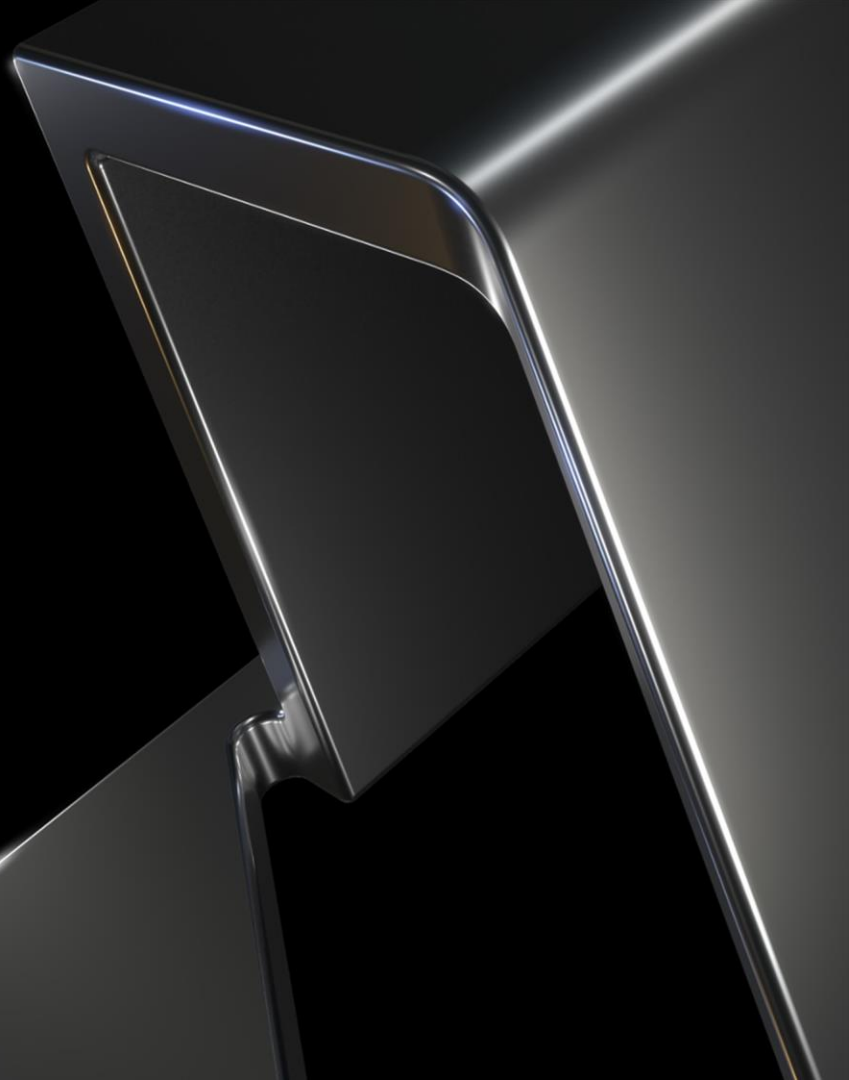
AUTODESK UNIVERSITY

Workflow from Alias SubD to VRED VR Collaborative Presention



Stefan Strohm

Lecturer Transportation Interior Design

Niels Vogel

Bachelor Student Transportation Interior Design

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Presentation Overview



- Introduction
  - The Presenters
  - Reutlingen University
  - Transportation Interior Design
- Semester Project
  - First Sketches
  - Fast Concept Model
  - Concept Verification in VR
  - Improvement Process
  - Introduction to VR Collaboration
  - Setup Scene in VRED VR
  - VR Classroom Presentation

Stefan Strohm

Lecturer Transportation Interior Design

Reutlingen University
Transportation
Interior Design





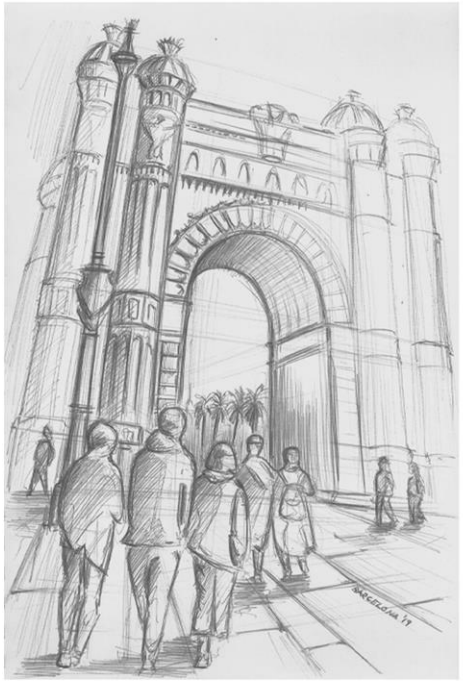
- https://www.youtube.com/channel/UC8i8si8LiR0NN7PTDcsfBOg
- CAS-Modeling and VR-Lab
- Autodesk Alias, Autodesk VRED Professional, Unreal Engine and Substance

Niels Vogel

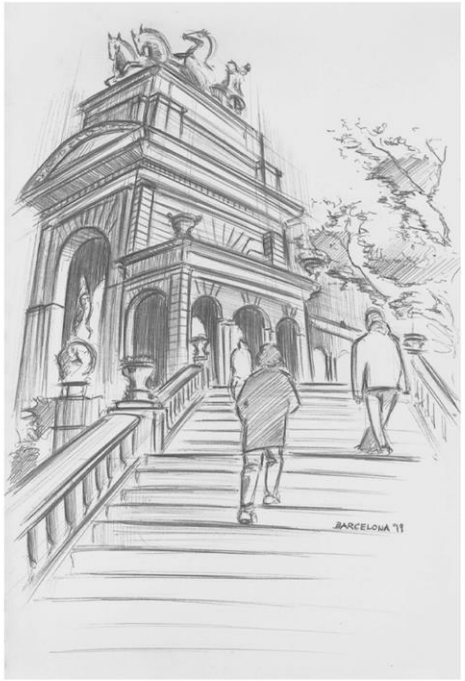
Bachelor Student Transportation Interior Design

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Transportation
Interior Design









Reutlingen University



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Transportation
Interior Design


Video presentation
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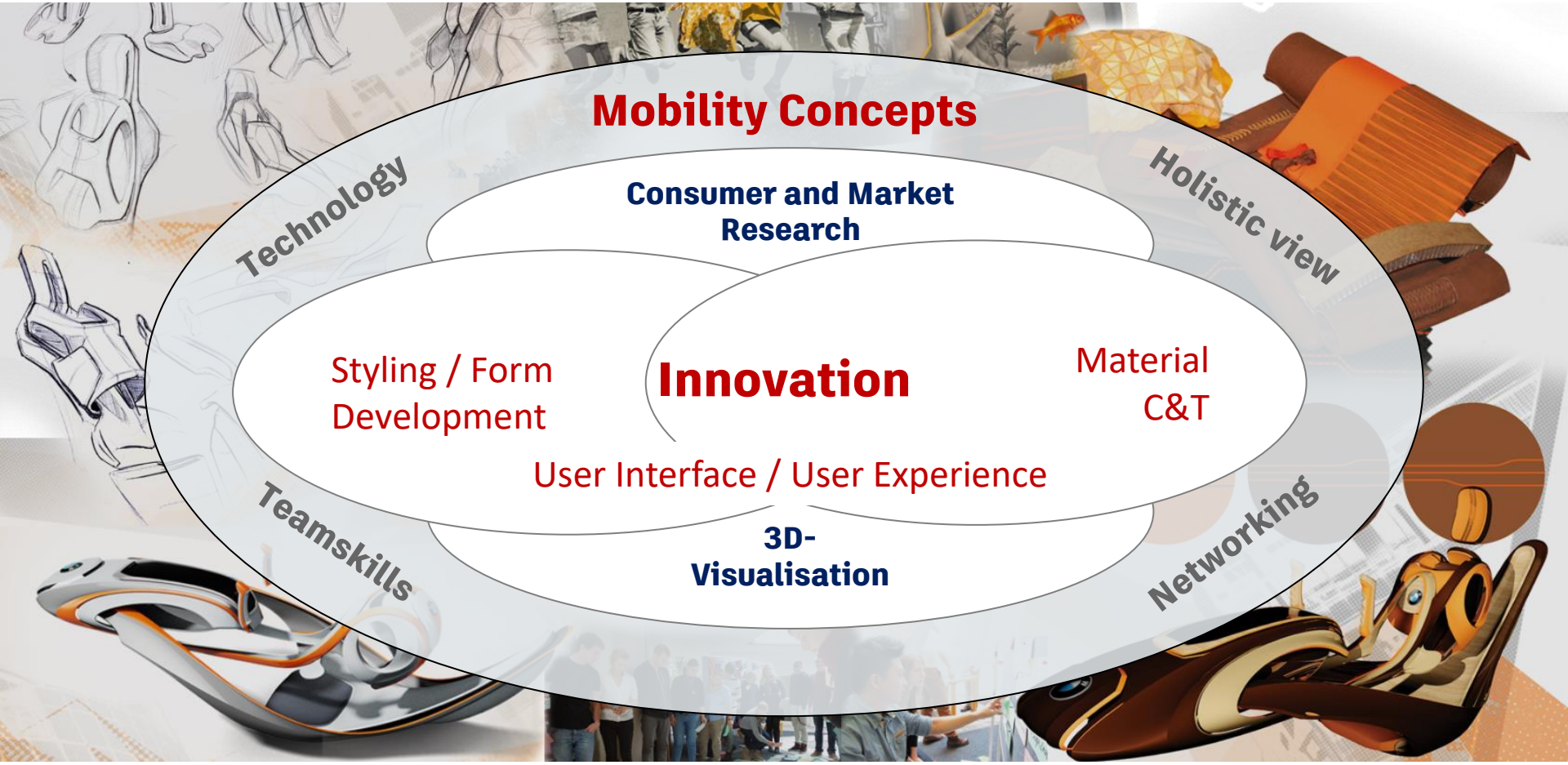
Transportation Interior Design



Reutlingen University
Transportation
Interior Design

Future Mobility – Concepts and Design

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Transportation
Interior Design



Semester Project

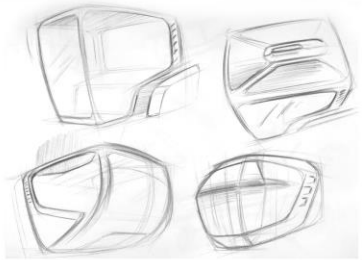
Semester Project

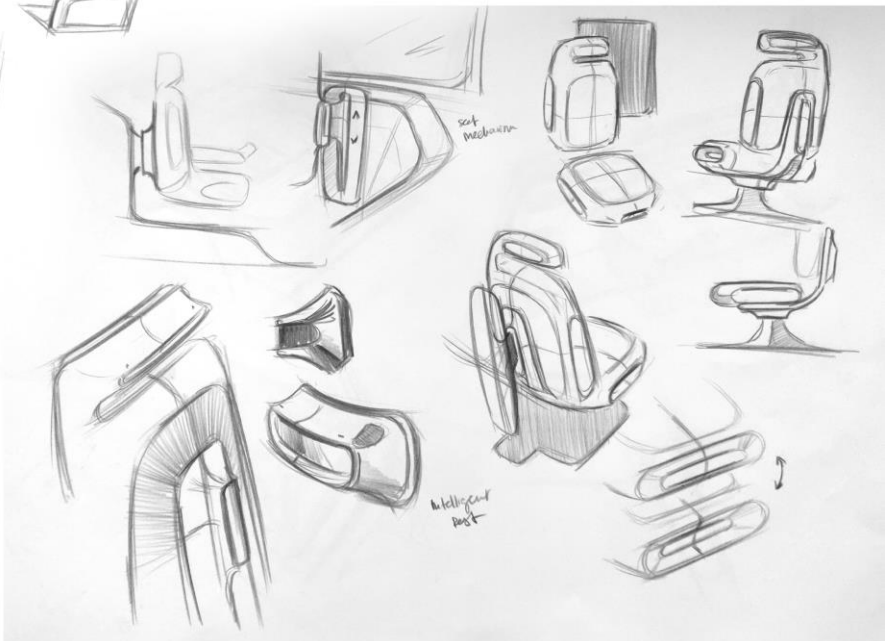




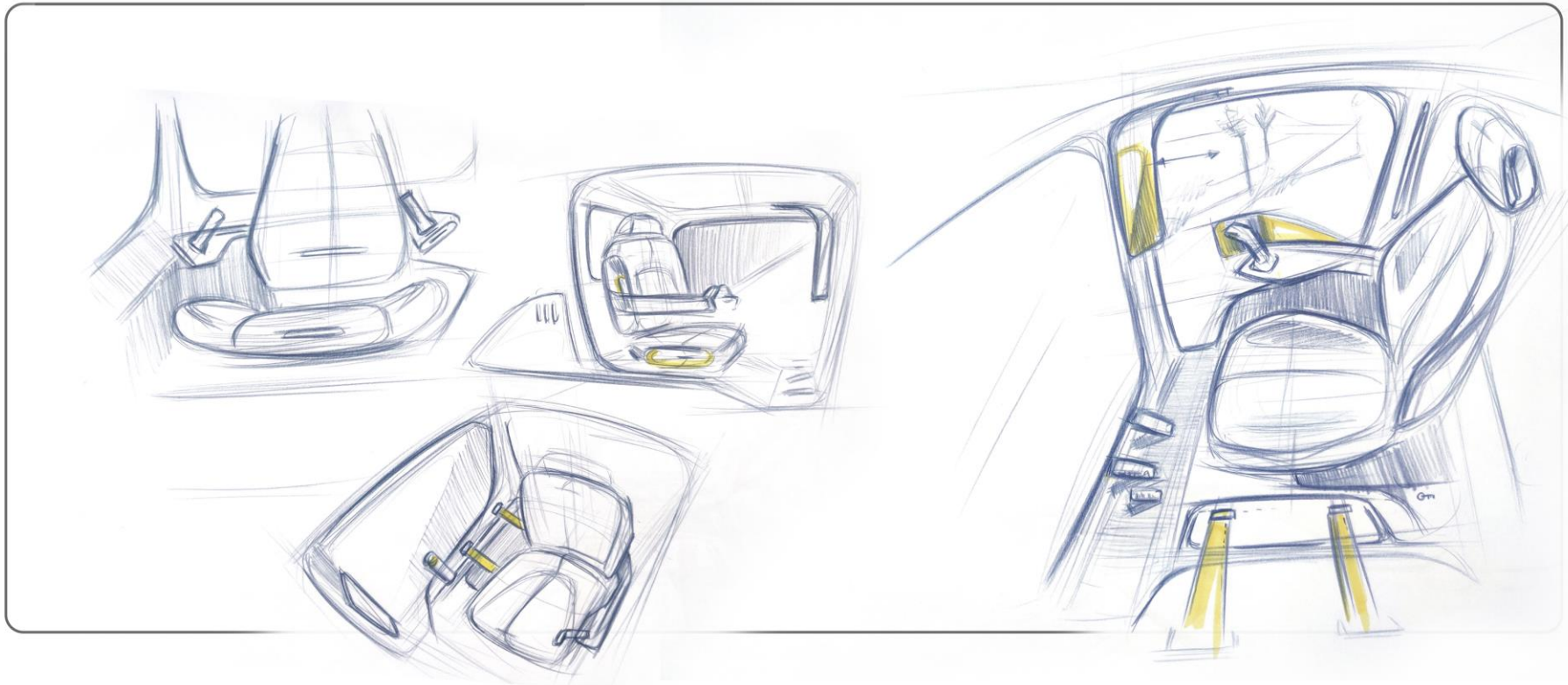
Sketches



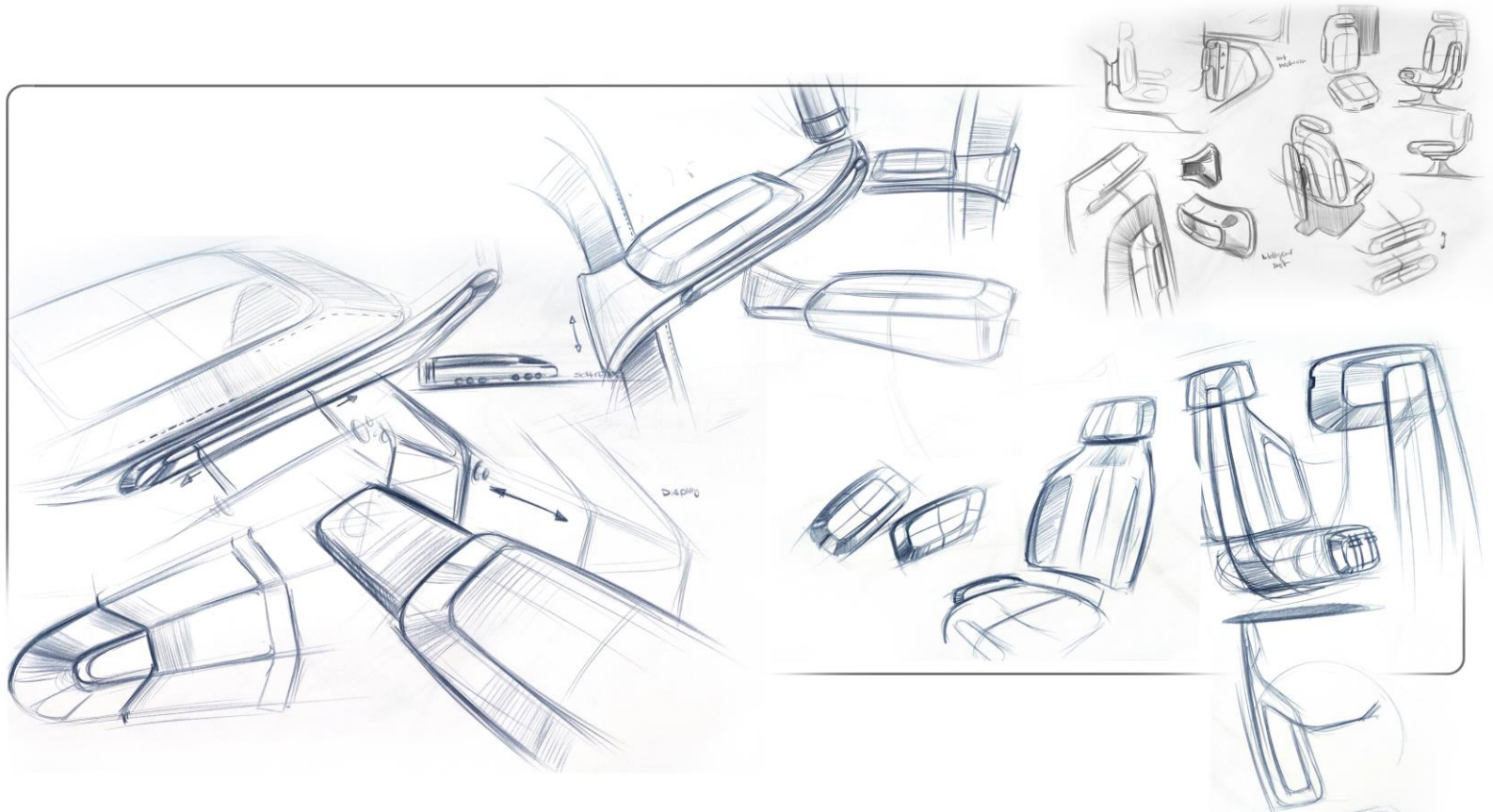




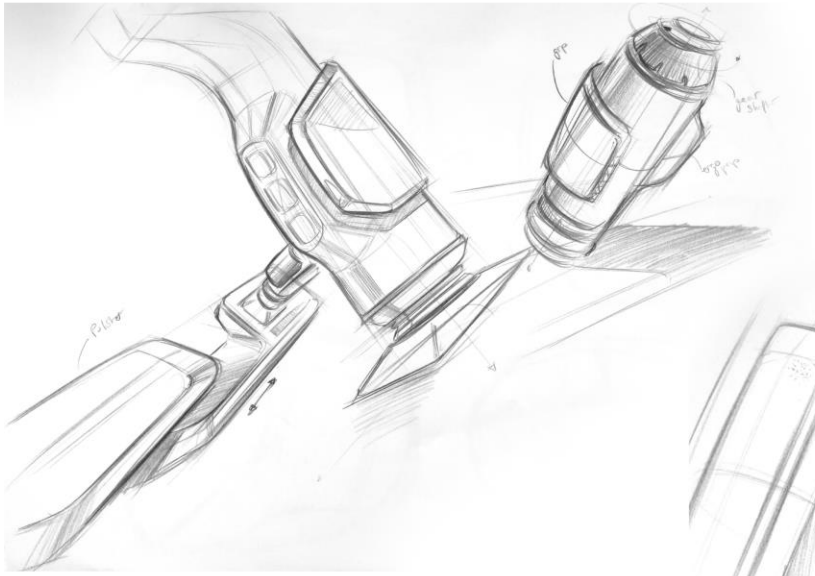
Sketches

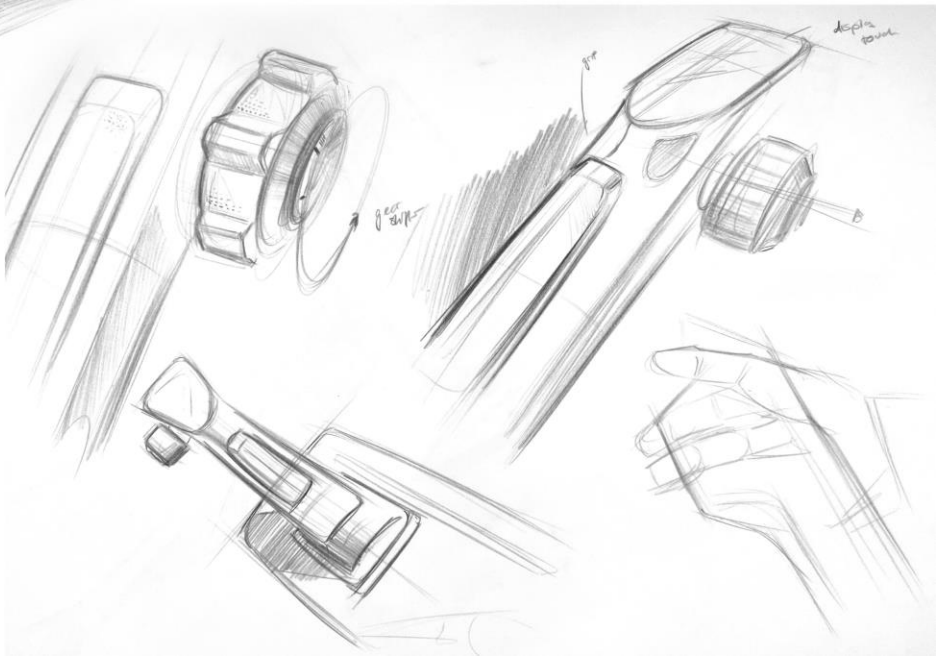


Sketches



Sketches

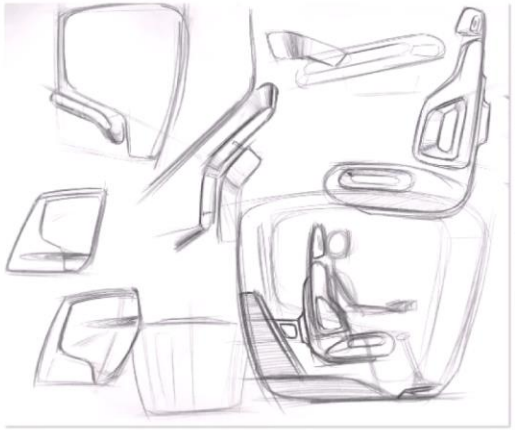


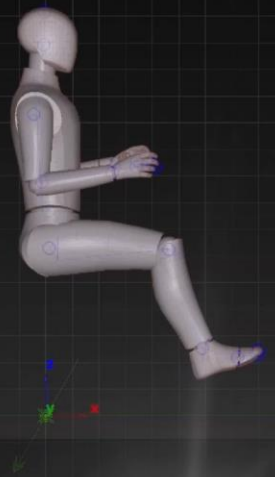


First Concept Model
Alias SubD

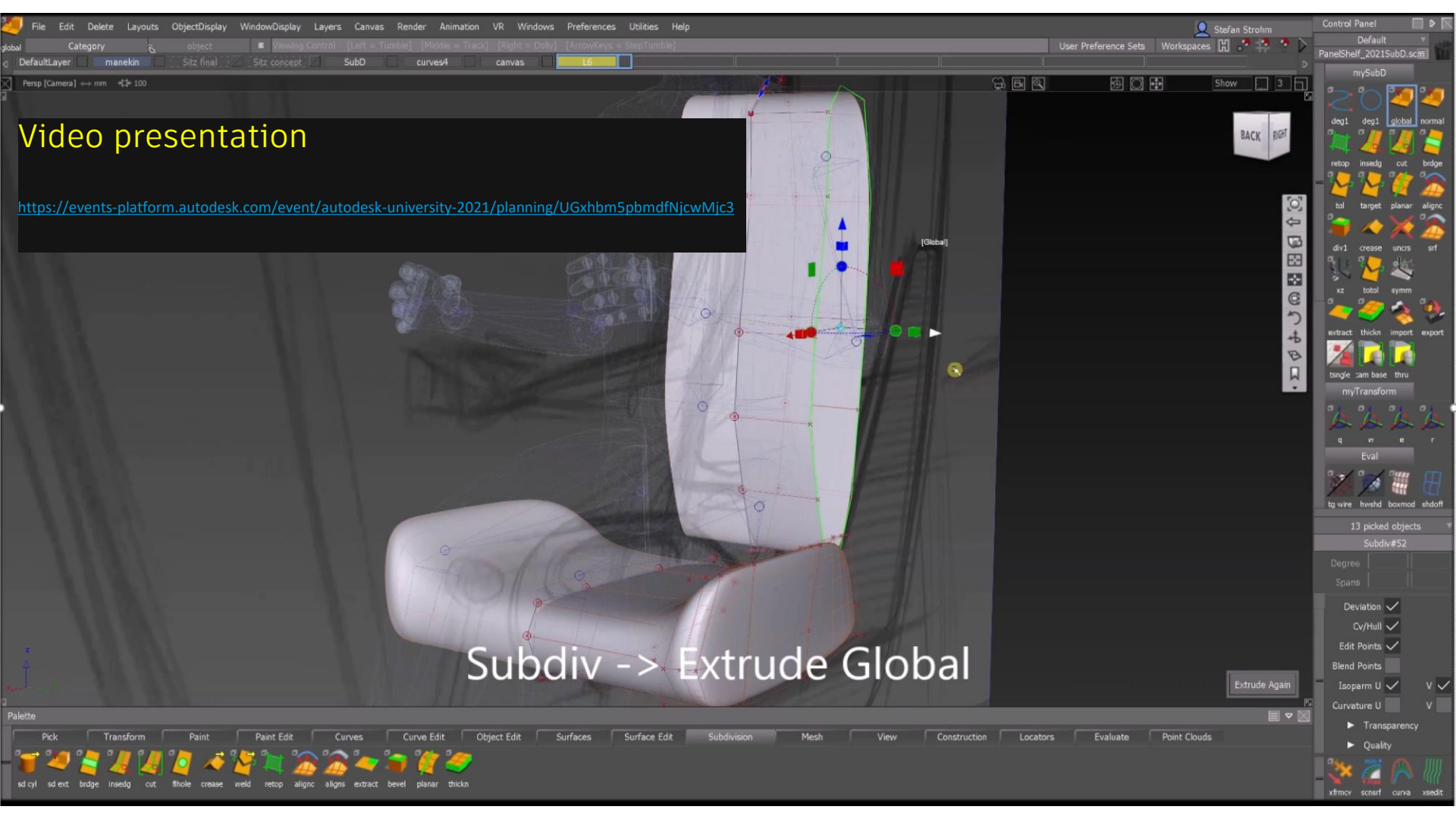
Video presentation

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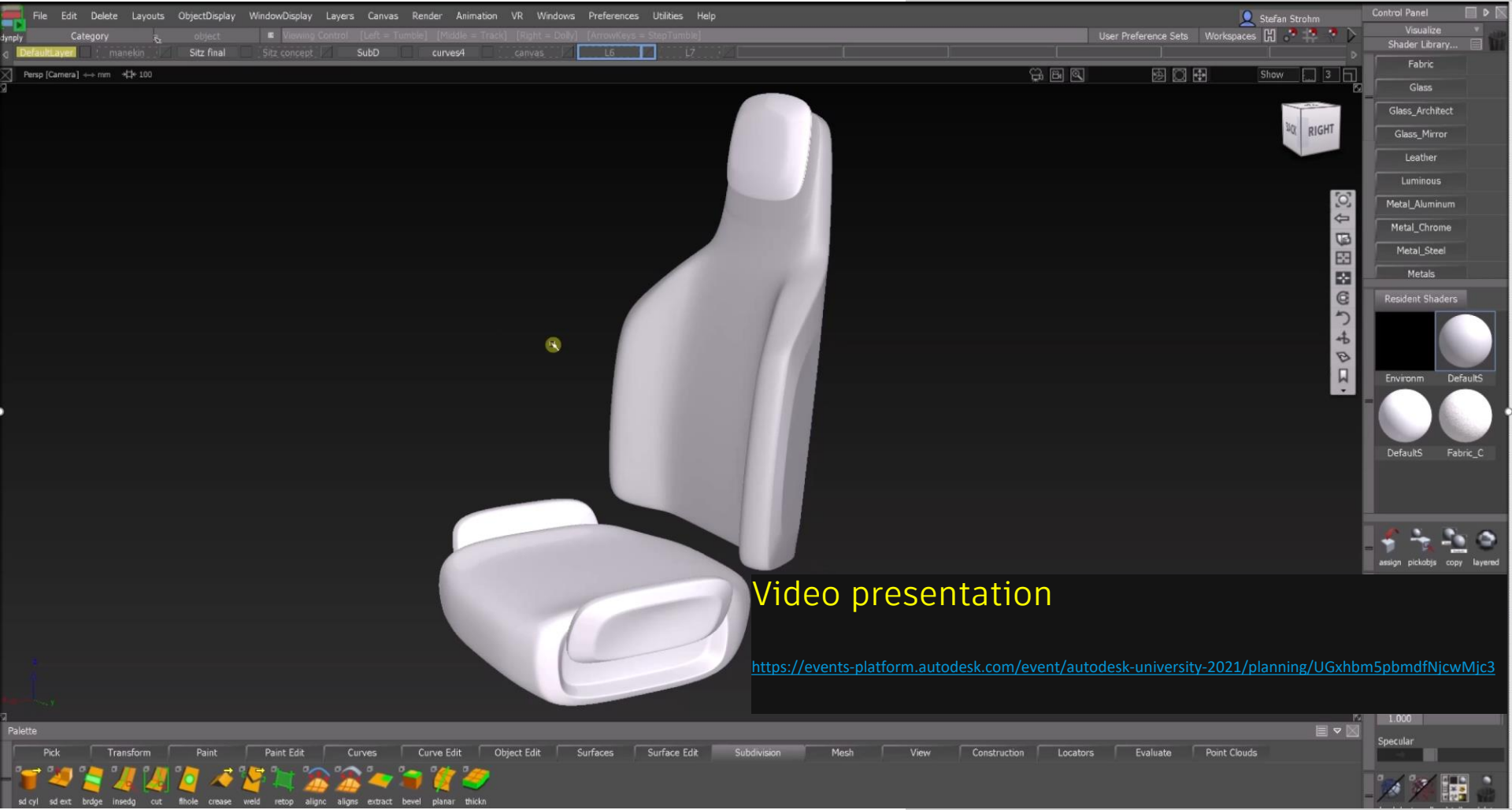
Drag&Drop Sketch


Video presentation
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Subdiv -> Extrude Global

Concept Verification in VR


Video presentation
https://events-platform.autodesk.com/event/autodesk-university-2021/planning/UGxhbm5pbmdfNjcwMjc3

Improvement Process


Video presentation
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Introduction
VR Collaboration

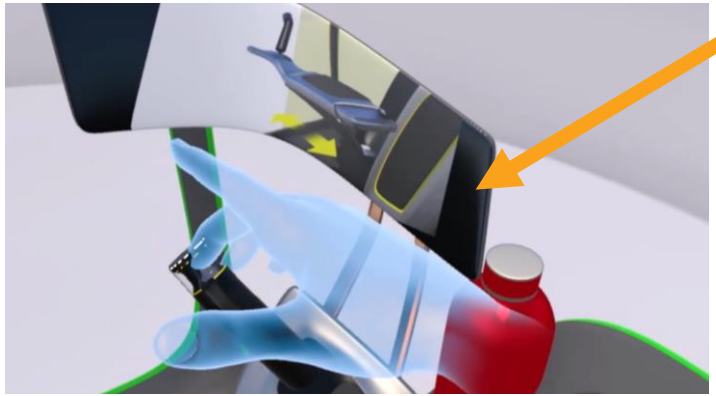
Point of Views

In a VR Session

Point of Views



Live CAM



HMD View

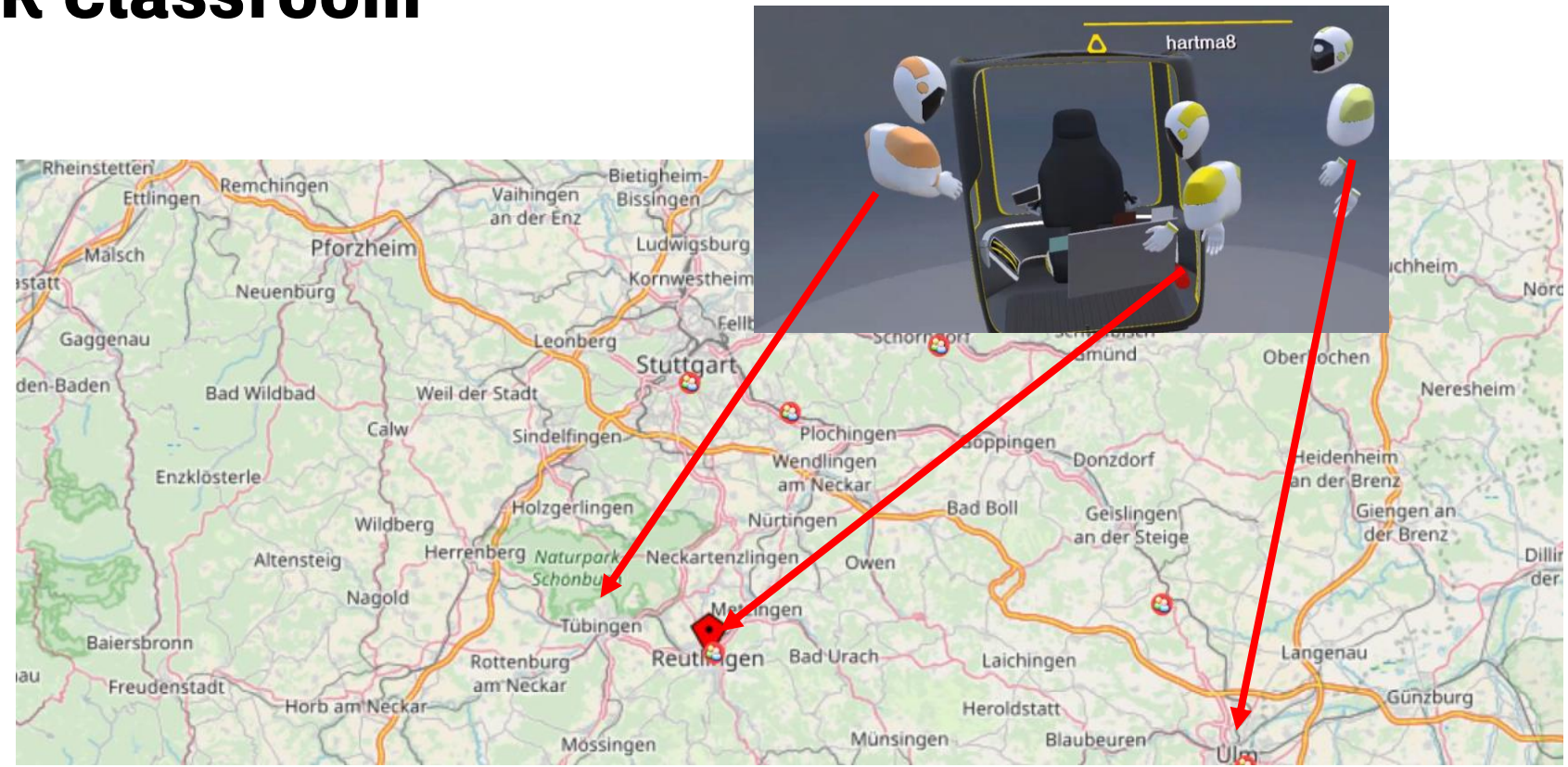


VRED View on Screen

VR Classroom

With participants at different locations
connected via VPN

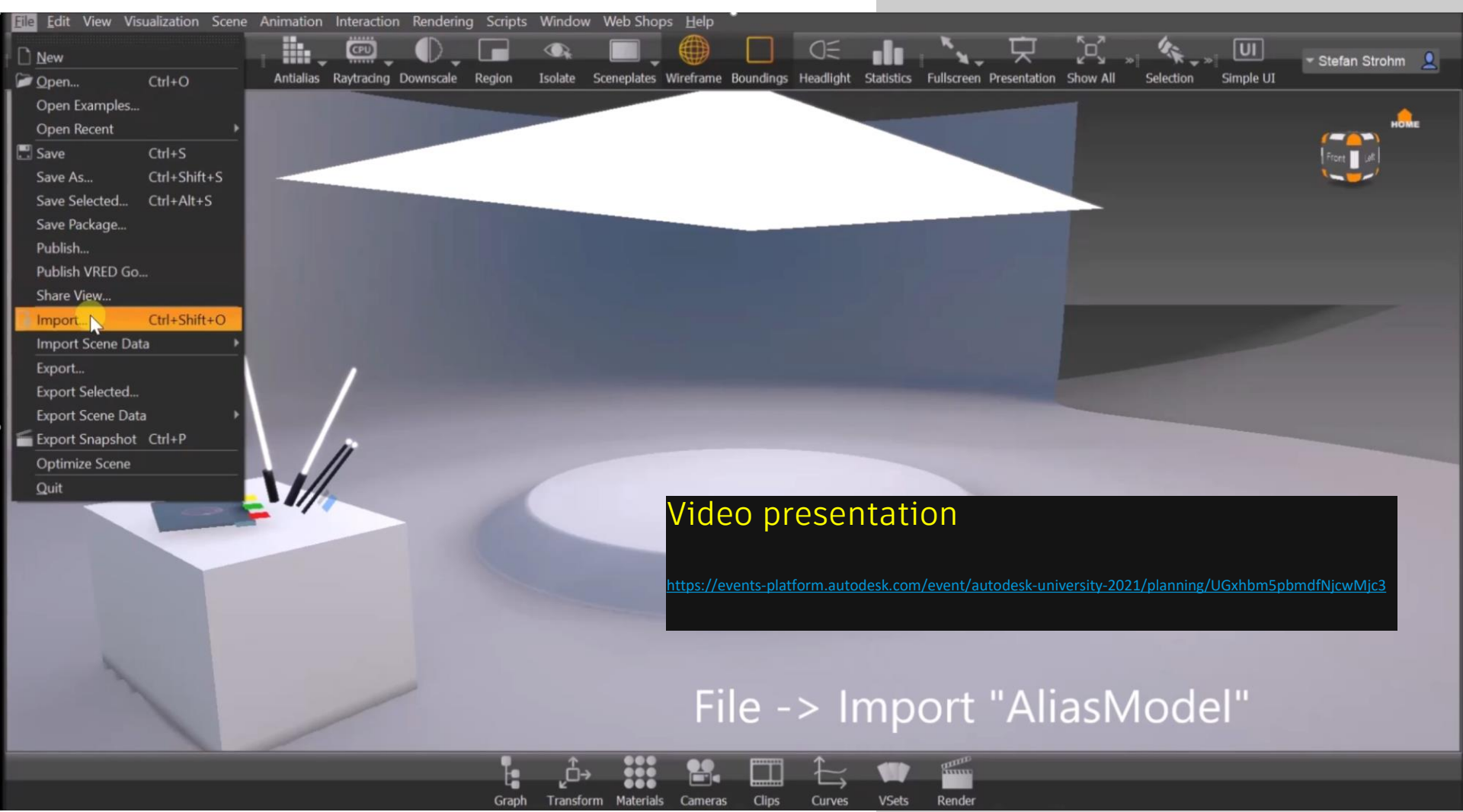
VR Classroom



Setup Scene in VRED VR

Open Start Model and Import Alias Model

Step by step


File Edit View Visualization Scene Animation Interaction Rendering Scripts Window Web Shops Help
New
Open... Ctrl+O
Open Examples...
Open Recent
Save Ctrl+S
Save As... Ctrl+Shift+S
Save Selected... Ctrl+Alt+S
Save Package...
Publish...
Publish VRED Go...
Share View...
Import... Ctrl+Shift+O
Import Scene Data
Export...
Export Selected...
Export Scene Data
Export Snapshot Ctrl+P
Optimize Scene
Quit
Antialias Raytracing Downscale Region Isolate Sceneplates Wireframe Boundings Headlight Statistics Fullscreen Presentation Show All Selection Simple UI
Stefan Strohm
HOME
Front Left
Video presentation
https://events-platform.autodesk.com/event/autodesk-university-2021/planning/UGxhbm5pbmdfNjcwMjc3
File -> Import "AliasModel"
Graph Transform Materials Cameras Clips Curves VSets Render

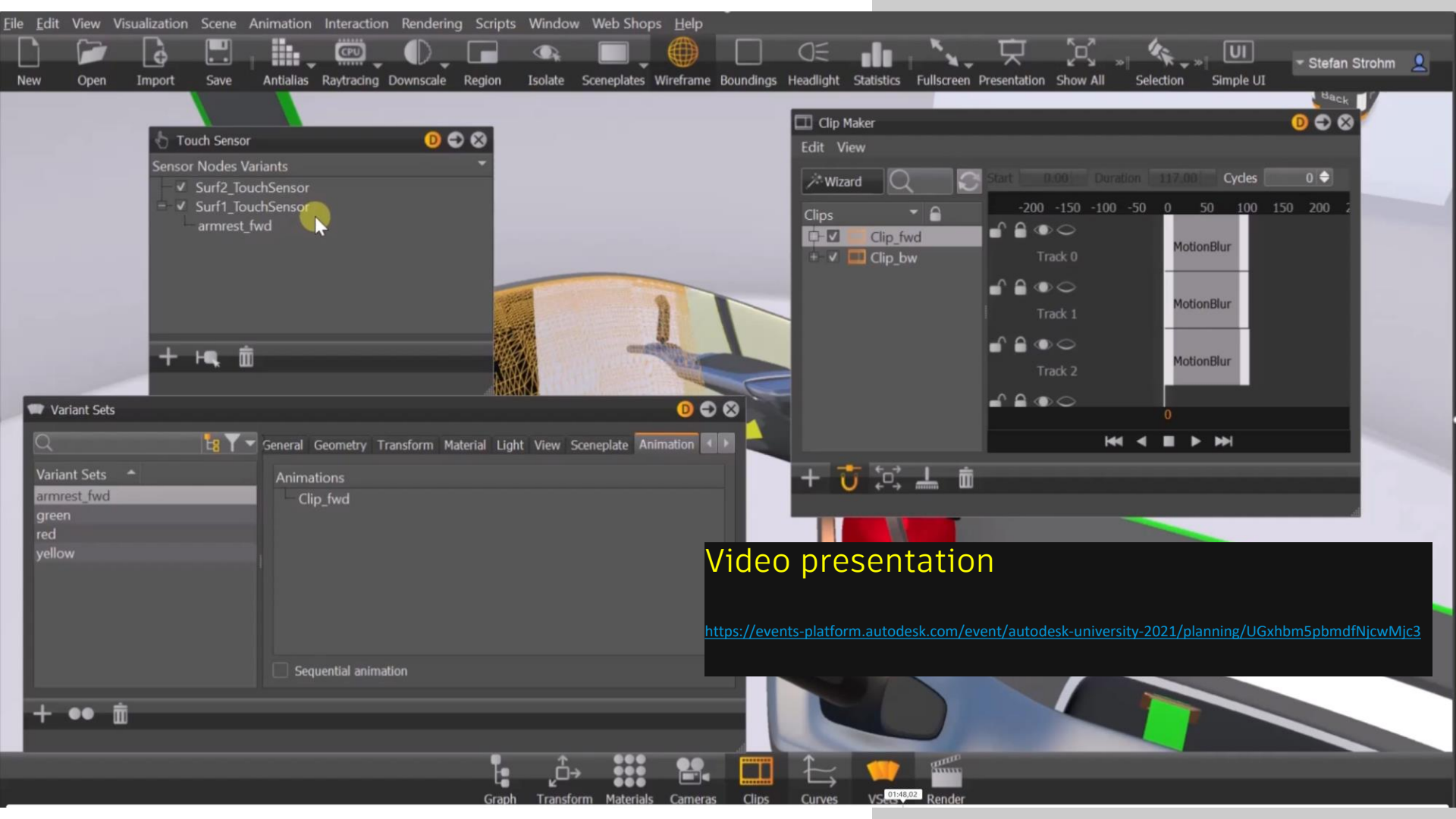
Three Useful Tools for Collaboration Sessions

- Touch Sensors
- Web Engines
- Movable Objects


File Edit View Visualization Scene Animation Interaction Rendering Scripts Window Web Shops Help
New Open Import Save Antialias Raytracing Downscale Region Isolate Sceneplates Wireframe Boundings Headlight Statistics Fullscreen Presentation Show All Selection Simple UI
Sign In
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Front
HOME
Collaboration
File
Participants
Model
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(self) radlader_vis
Video presentation
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Graph Transform Materials Cameras Clips Curves VSets Render

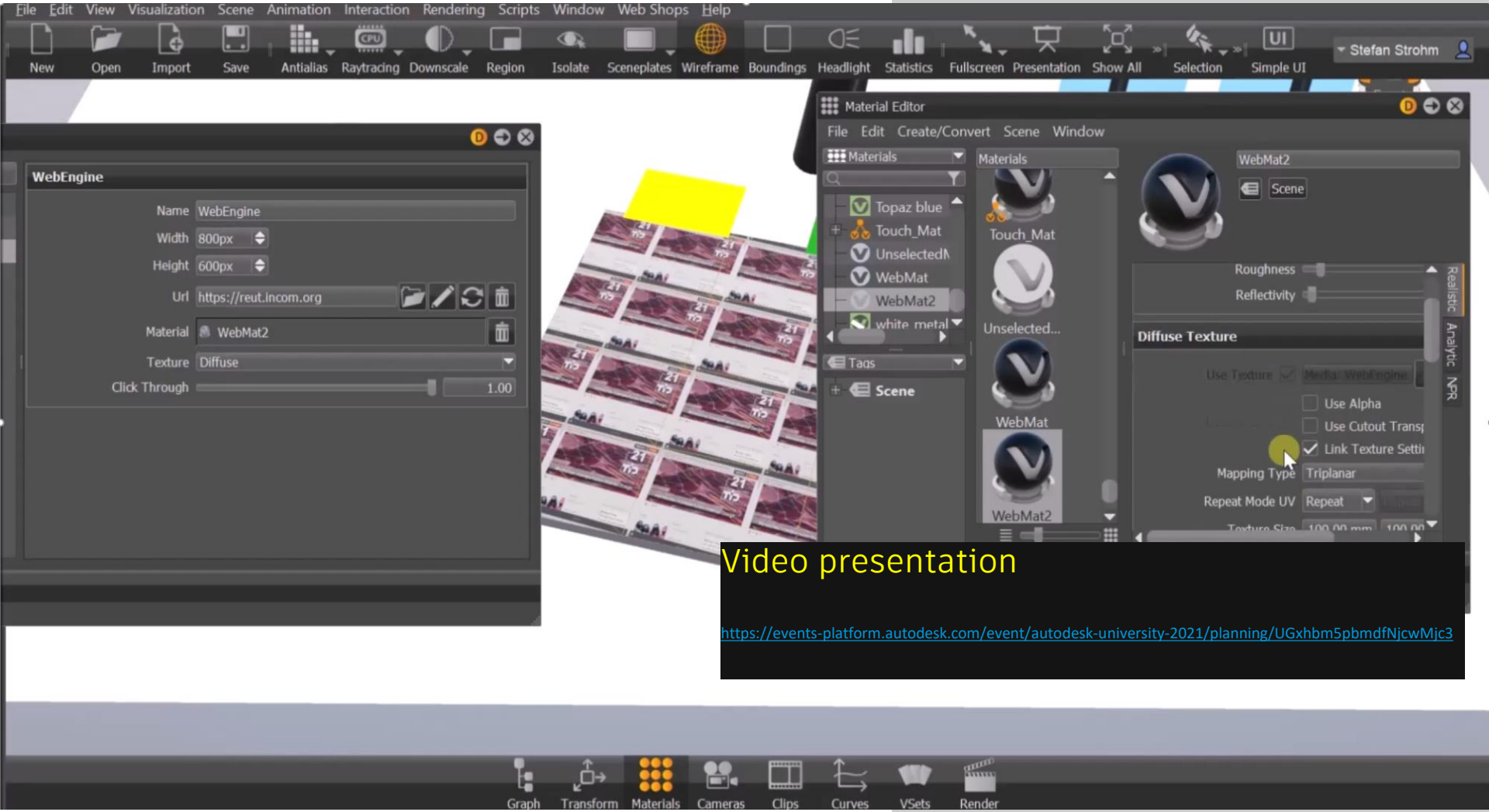
Define a Touch Sensor

Step by Step


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Stefan Strohm
Touch Sensor
Sensor Nodes Variants
Surf2_TouchSensor
Surf1_TouchSensor
armrest_fwd
Clip Maker
Edit View
Wizard
Start 0.00 Duration 117.00 Cycles 0
Clips
Clip_fwd
Clip_bw
-200 -150 -100 -50 0 50 100 150 200
Track 0
Track 1
Track 2
MotionBlur
MotionBlur
MotionBlur
Variant Sets
General Geometry Transform Material Light View Sceneplate Animation
Variant Sets
armrest_fwd
green
red
yellow
Animations
Clip_fwd
Sequential animation
Video presentation
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Graph Transform Materials Cameras Clips Curves Render

Define a WebEngine

Step by Step

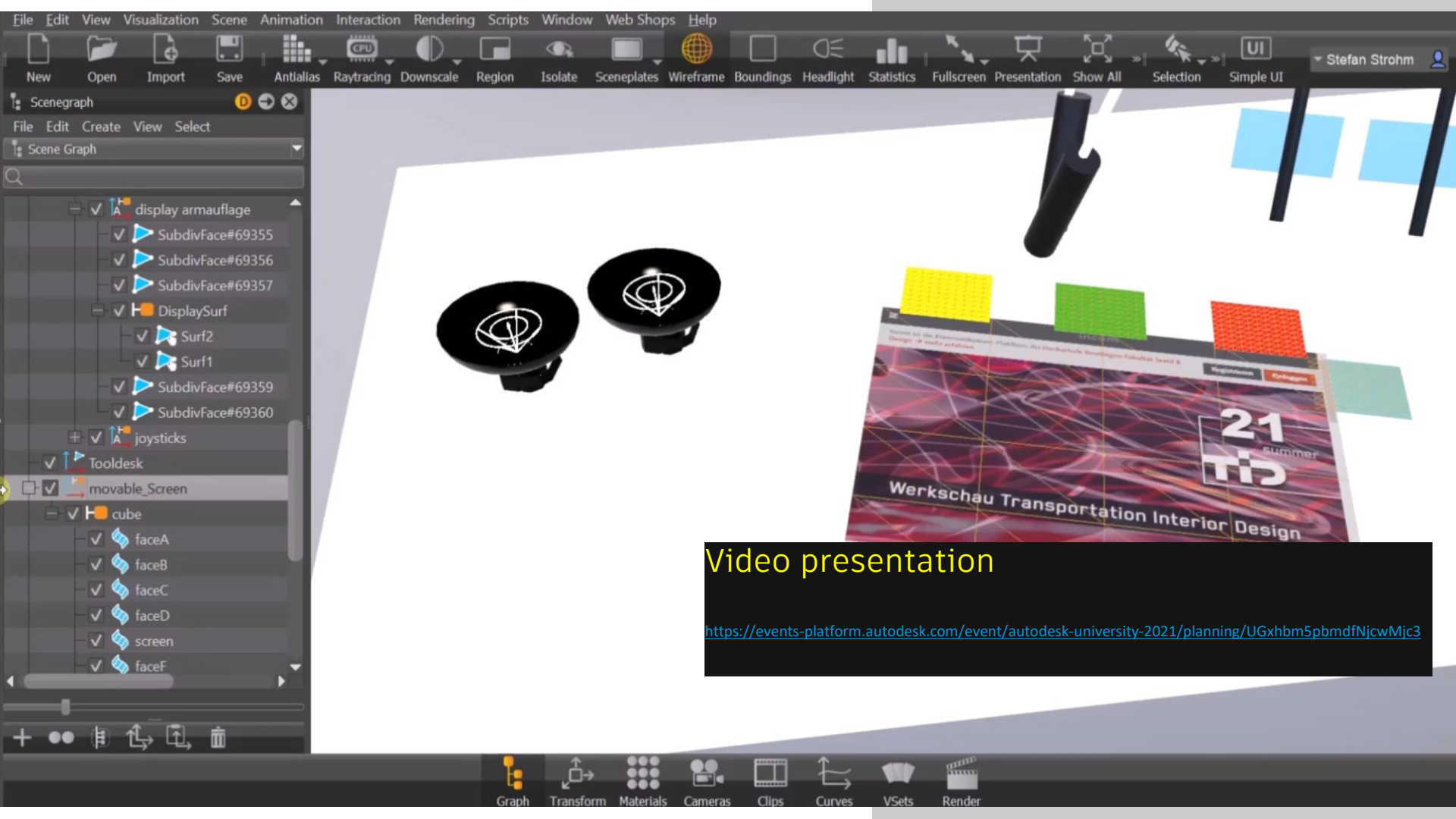


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Specify Movable Objects

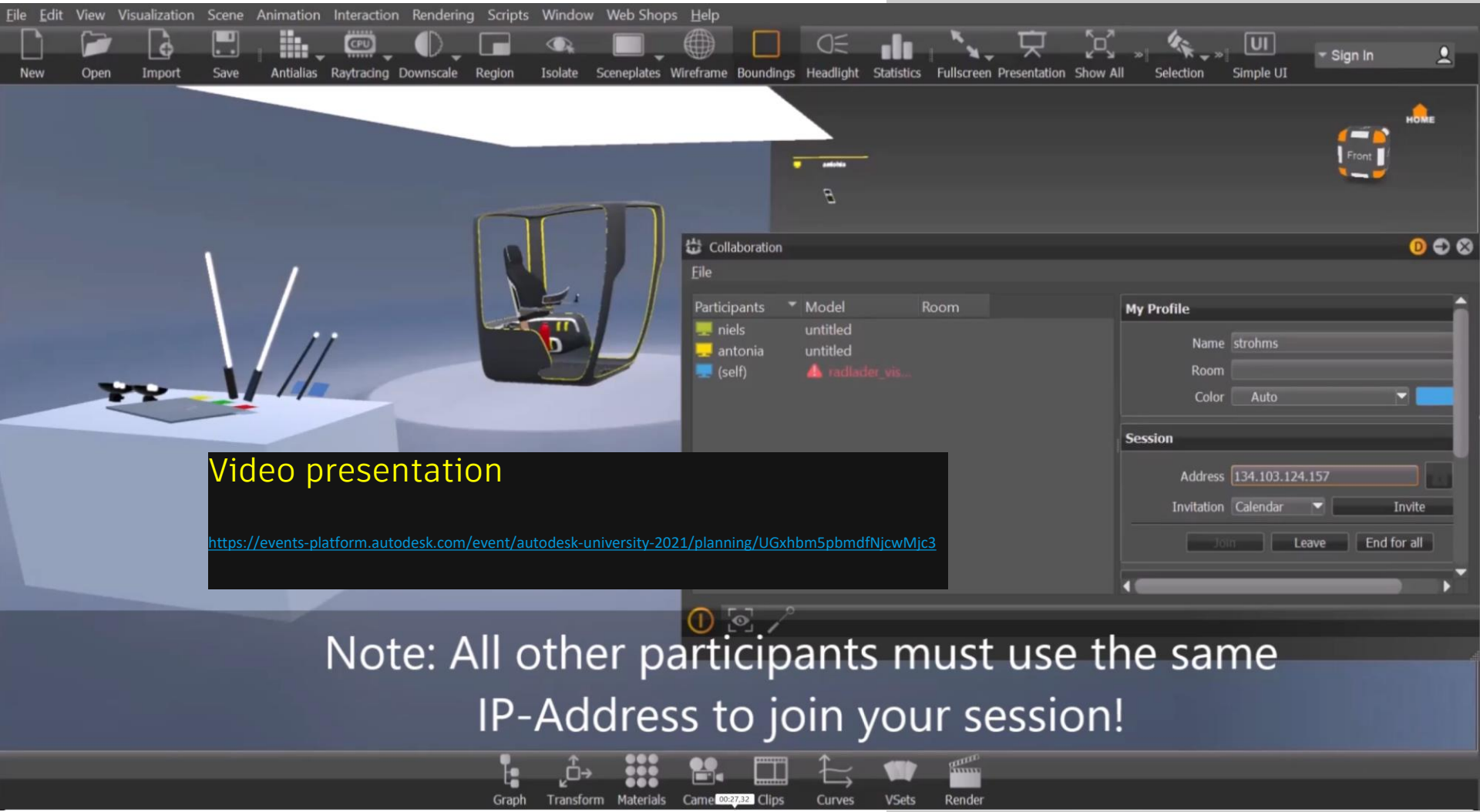
Step by Step


File Edit View Visualization Scene Animation Interaction Rendering Scripts Window Web Shops Help
New Open Import Save Antialias Raytracing Downscale Region Isolate Sceneplates Wireframe Boundings Headlight Statistics Fullscreen Presentation Show All Selection Simple UI
Stefan Strohm
Scenegraph
File Edit Create View Select
Scene Graph
display armauflage
SubdivFace#69355
SubdivFace#69356
SubdivFace#69357
DisplaySurf
Surf2
Surf1
SubdivFace#69359
SubdivFace#69360
joysticks
Tooldesk
movable_Screen
cube
faceA
faceB
faceC
faceD
screen
faceF
21 summer
TID
Werkschau Transportation Interior Design
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Graph Transform Materials Cameras Clips Curves VSets Render

VR Classroom Presentation

Start a VRED VR Collaborative Session

Step by step


File Edit View Visualization Scene Animation Interaction Rendering Scripts Window Web Shops Help
New Open Import Save Antialias Raytracing Downscale Region Isolate Sceneplates Wireframe Boundings Headlight Statistics Fullscreen Presentation Show All Selection Simple UI
Sign In
HOME
Front
Collaboration
File
Participants Model Room
niels untitled
antonia untitled
(self) radiader_vis...
My Profile
Name strohms
Room
Color Auto
Session
Address 134.103.124.157
Invitation Calendar Invite
Join Leave End for all
Video presentation
https://events-platform.autodesk.com/event/autodesk-university-2021/planning/UGxhbm5pbmdfNjcwMjc3
Note: All other participants must use the same IP-Address to join your session!
Graph Transform Materials Clips Curves VSets Render



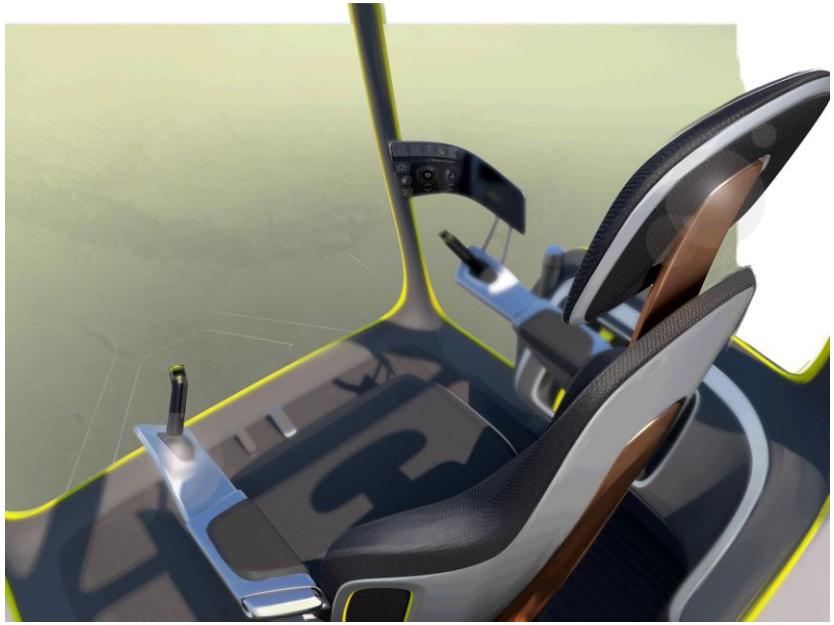
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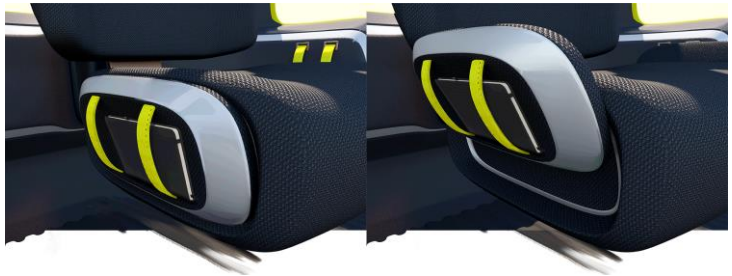
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Semester Project

Renderings by Niels Vogel



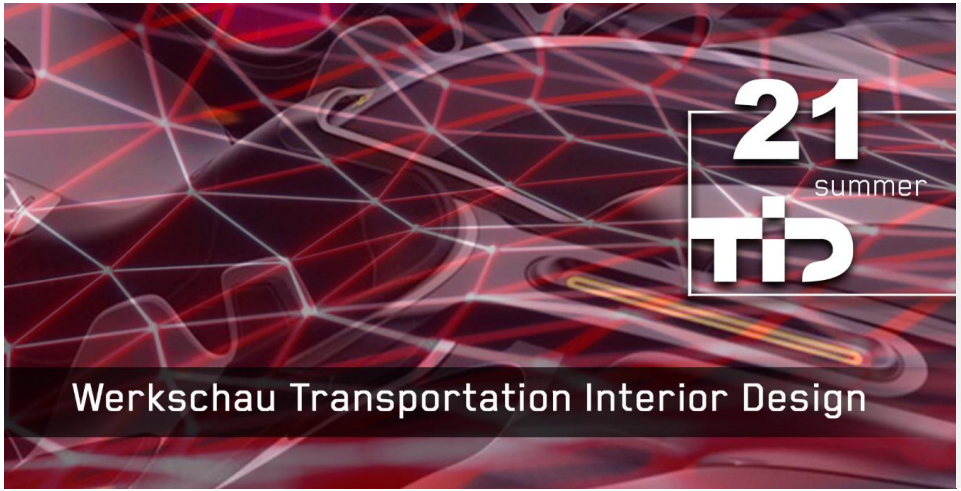


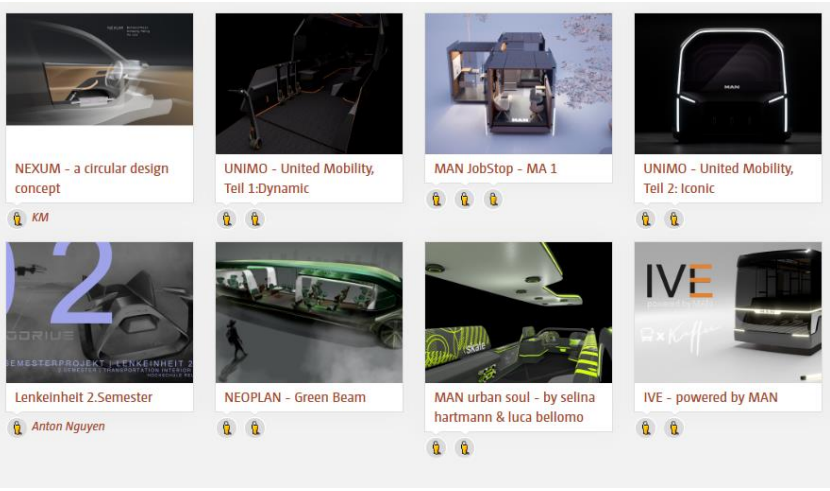


Links – Transportation Interior Design

Reutlingen University
Transportation
Interior Design

Online Exhibition - https://reut.incom.org/project/17





Movable Objects and Touchsensors (Outtakes)


File Edit View Visualization Scene Animation Interaction Rendering Scripts Window Web Shops Help
New Open Import Save Antialias Raytracing Downscale Region Isolate Sceneplates Wireframe Boundings Headlight Statistics Fullscreen Presentation Show All Zoom To Grid Ruler Transform Selection Texturing Simple UI
Stefan Strohm
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Lars
HOME
Left
Video presentation
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Graph Transform Materials Cameras Clips Curves VSets Render
3854.2 MB RR-GL Render Perspective (Id 0 Res 1920 x 908)
Units mm Up Z NCP 152.91 FCP 305830.00 FOV 45.00 ICV

Thank you

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