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Lodz University of Technology





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Equipment

- HTC Vive
- HTC Vive Pro
- HTC Vive Pro Eye





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Equipment

- Oculus Rift
- Oculus Quest





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Equipment

- Samsung Gear VR + S9





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Equipment

Microsoft HoloLens

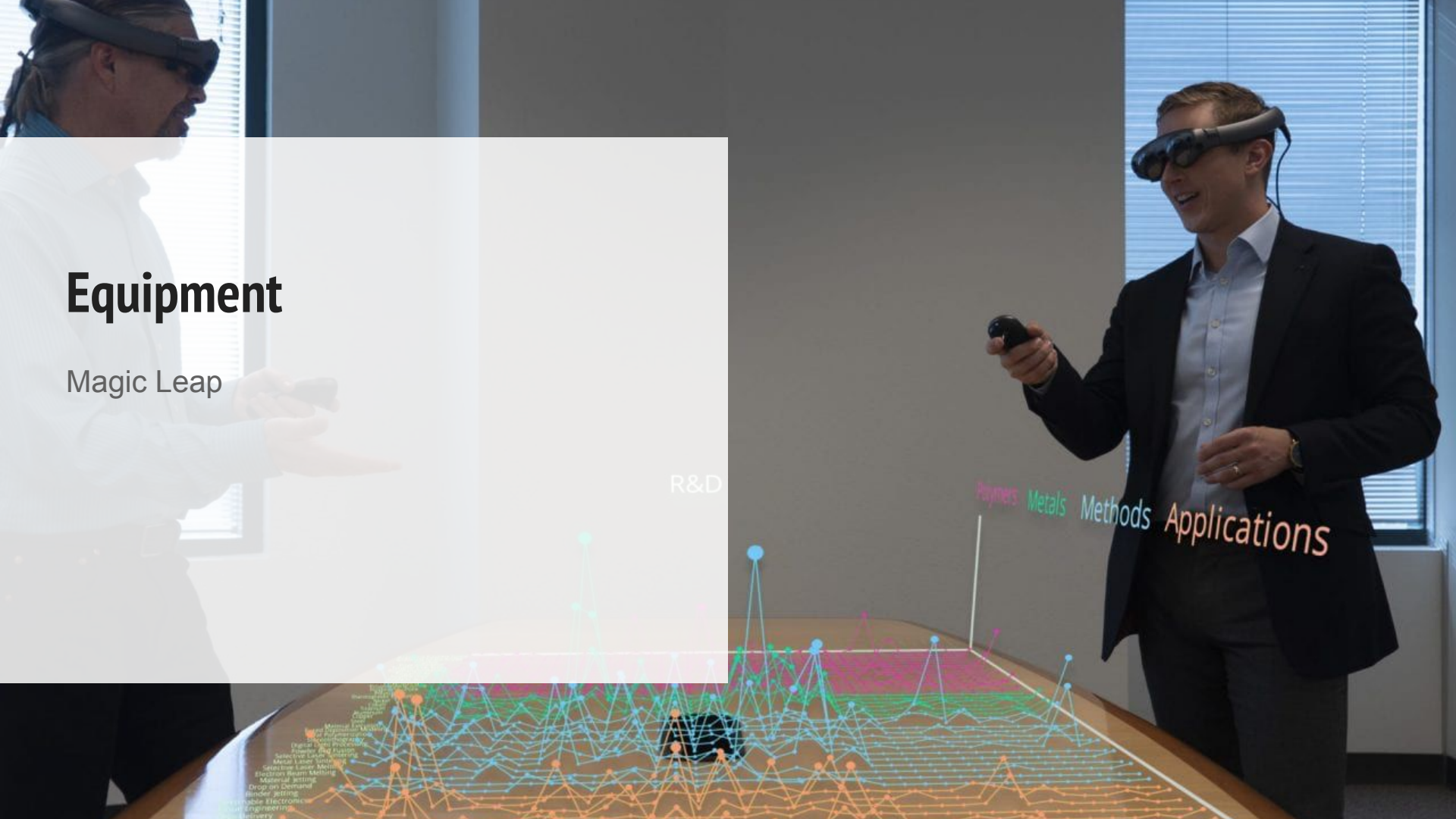


Equipment

Magic Leap

R&D

Polymers Metals Methods Applications





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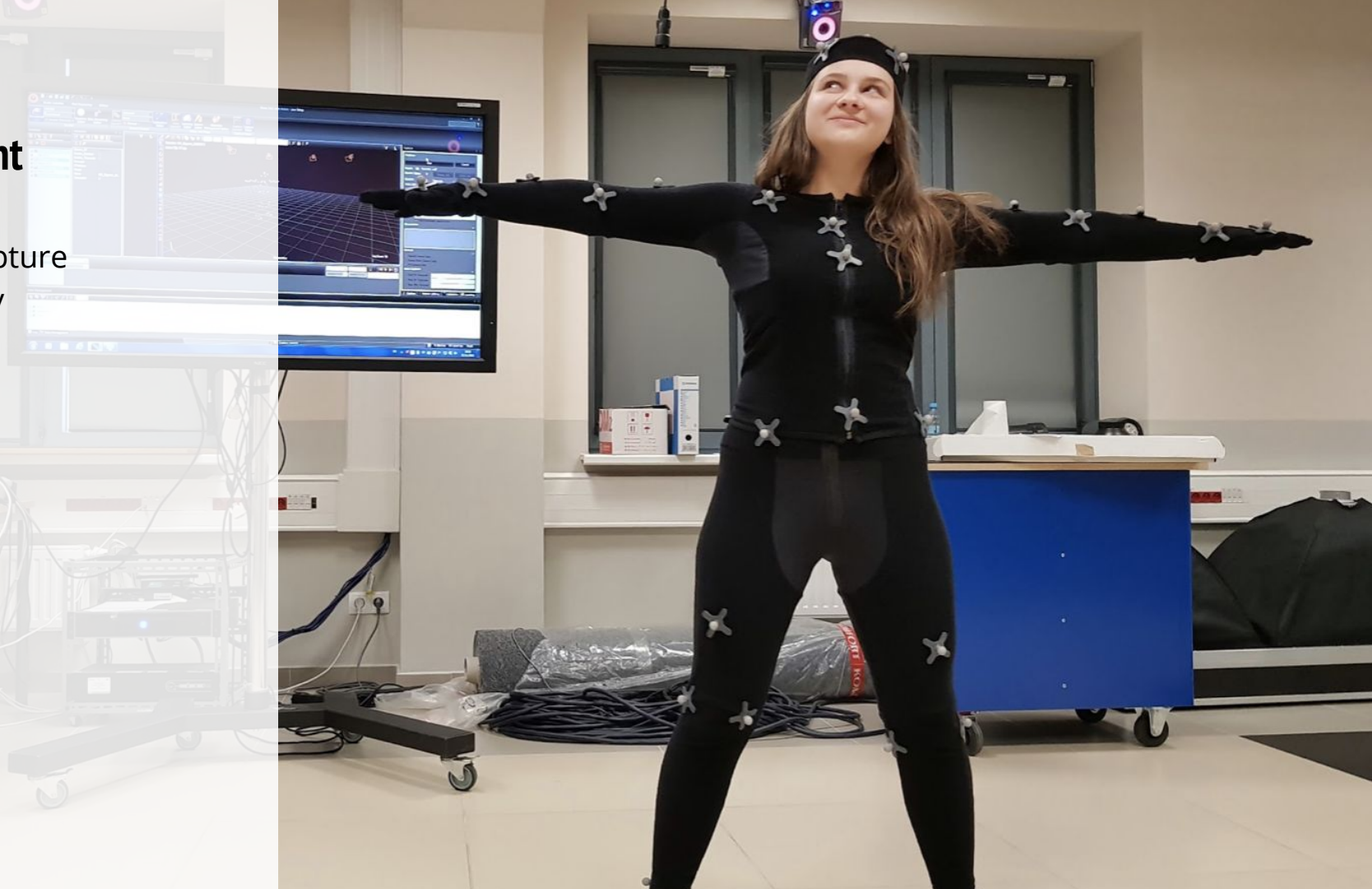
Equipment

- Desktops
- Laptops



Equipment

motion capture
technology





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Equipment

3D Cave to perform advanced projects related to animation or games for virtual reality;

In addition, the laboratory includes 3D scanners that allow you to scan a given object, along with its Artec texturing.



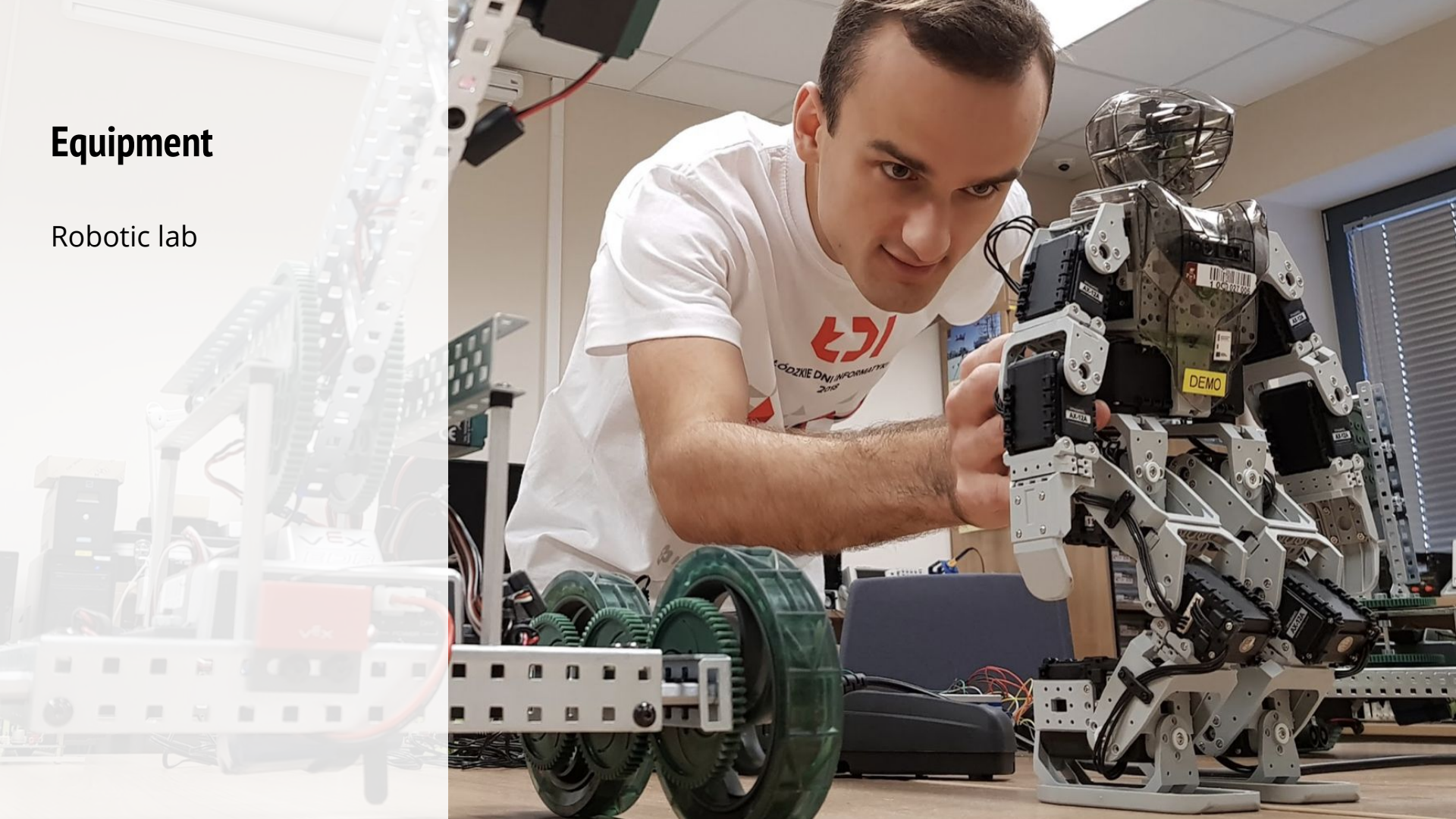
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Equipment - EEG toolkit



Equipment

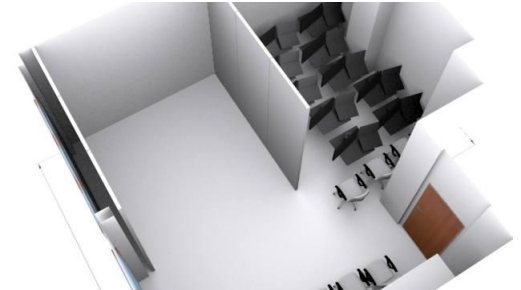
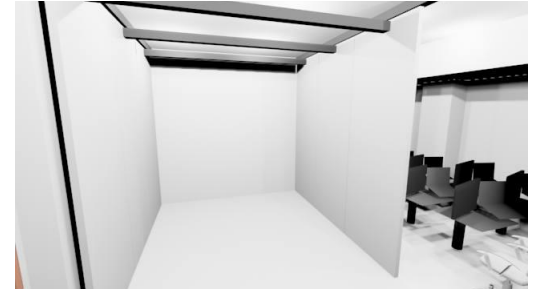
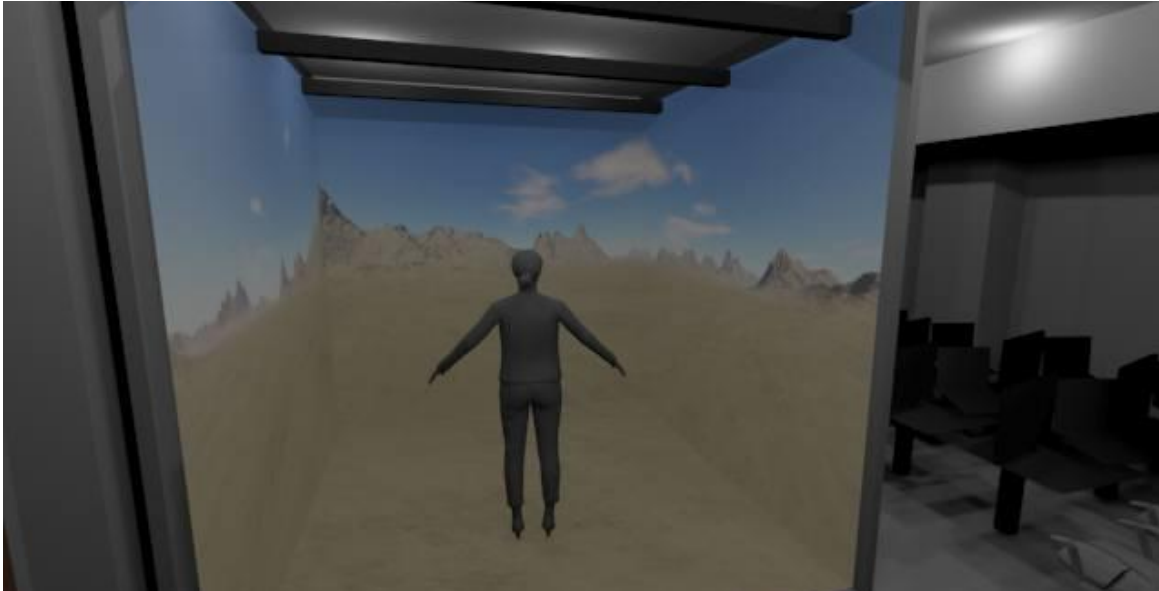
Robotic lab



A person wearing a VR headset and holding a controller is standing in a dimly lit room, likely a VR lab or workshop. The room is filled with people, some of whom are also using VR. The lighting is blue and low-key, creating a futuristic atmosphere. The text "Arranging VR space" is overlaid in the center of the image.

Arranging VR space

VR space for trainings



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VR space

The immersive and interactive
Virtual Reality Chair.



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**VIRTUAL
TECHNOLOGIES**
@WESTERN BALKAN UNIVERSITIES

VR space

VR Treadmill - allows for movement in VR environment.



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VR space

rotate freely in any direction according to the user's steps.

A user is able to walk and run inside the sphere, viewing the virtual environment through the head-mounted display.



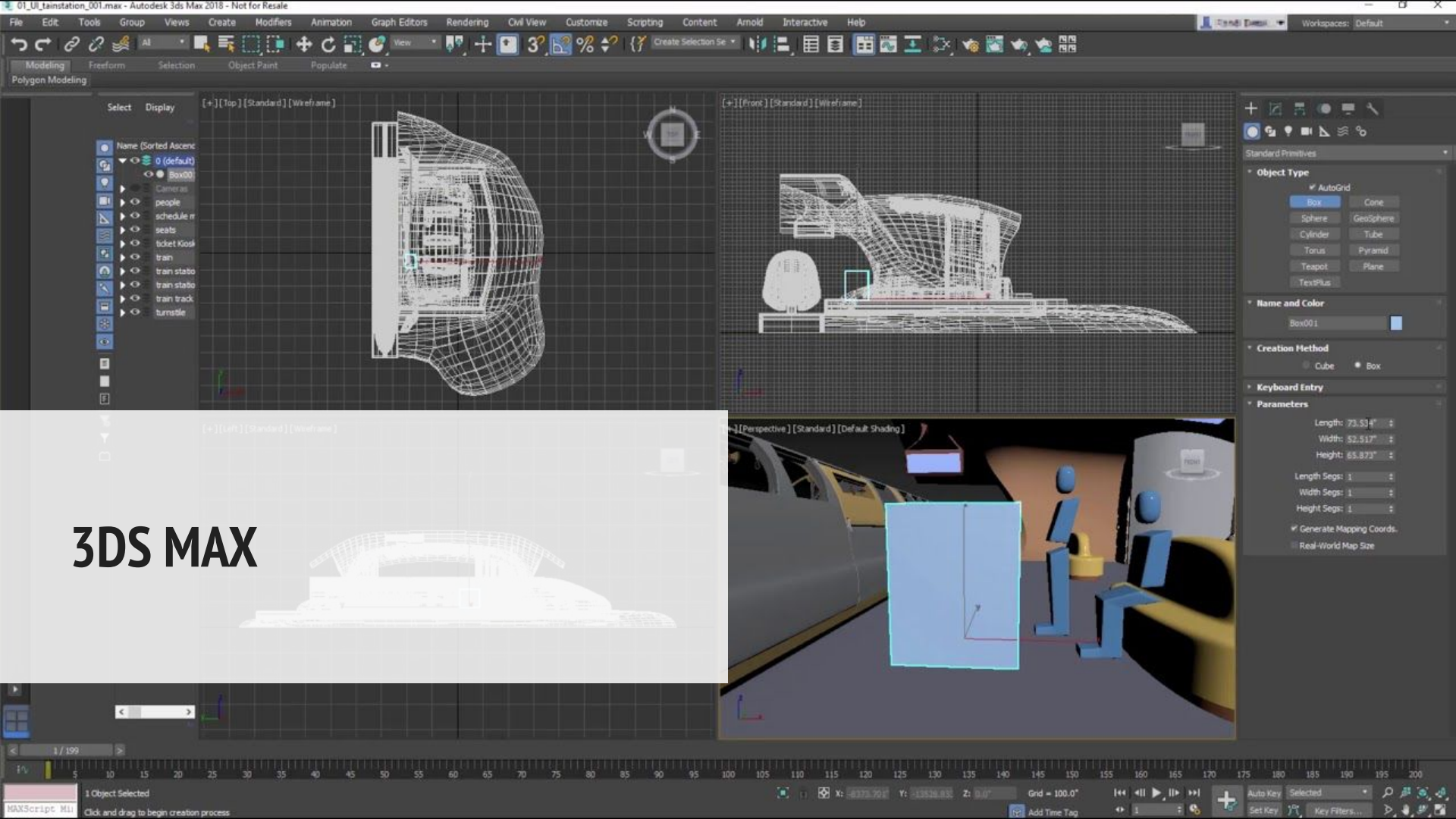
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Teaching / learning VR and AR

and teach through VR and AR



3DS MAX



Inspector

- 3rd Person Controller
 - Tag: Player
 - Layer: Default
 - Prefab: Select Revert Apply
 - Transform**
 - Position: X: 1.437974, Y: 0.4866836, Z: -2.162002
 - Rotation: X: 0, Y: 0, Z: 0
 - Scale: X: 1, Y: 1, Z: 1
 - Animation**
 - Animation: run
 - Play Automatically:
 - Animate Physics:
 - Culling Type: Based On Renderers
 - Character Controller**
 - Third Person Controller (Script)**
 - Third Person Camera (Script)**
 - Script: ThirdPersonCamera
 - Camera Transform: None (Transform)
 - Distance: 3
 - Height: 1
 - Angular Smooth Lag: 0.1
 - Angular Max Speed: 175
 - Height Smooth Lag: 0.3
 - Snap Smooth Lag: 0.2
 - Snap Max Speed: 720
 - Clamp Head Position Screen Space: 0.75
 - Lock Camera Timeout: 0.2

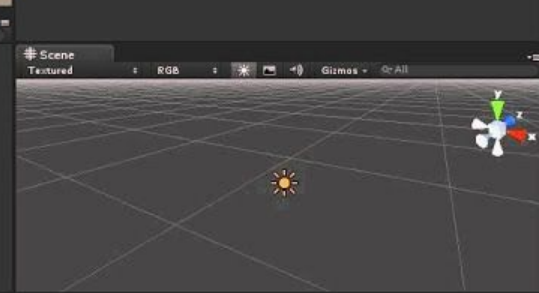
Unity 3D

Hierarchy

- Create -
- 3rd Person Controller
 - Cube
 - Cube
 - Directional light
 - Main Camera
 - Plane
 - Point light
 - Point light
 - Point light
 - Sphere

Project

- Create -
- Standard Assets
 - Character Controllers
 - 3rd Person Controller
 - First Person Controller
 - Sources





Project



**Applying and coordinating
VR/AR projects**



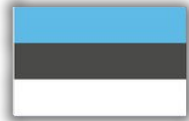
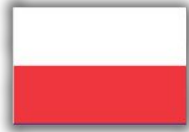


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Project - ViMeLa



Project - ATOMIC

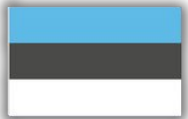
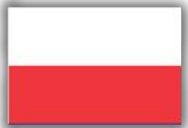




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VRAna

Skeleton, details of the
skeleton, locomotion.





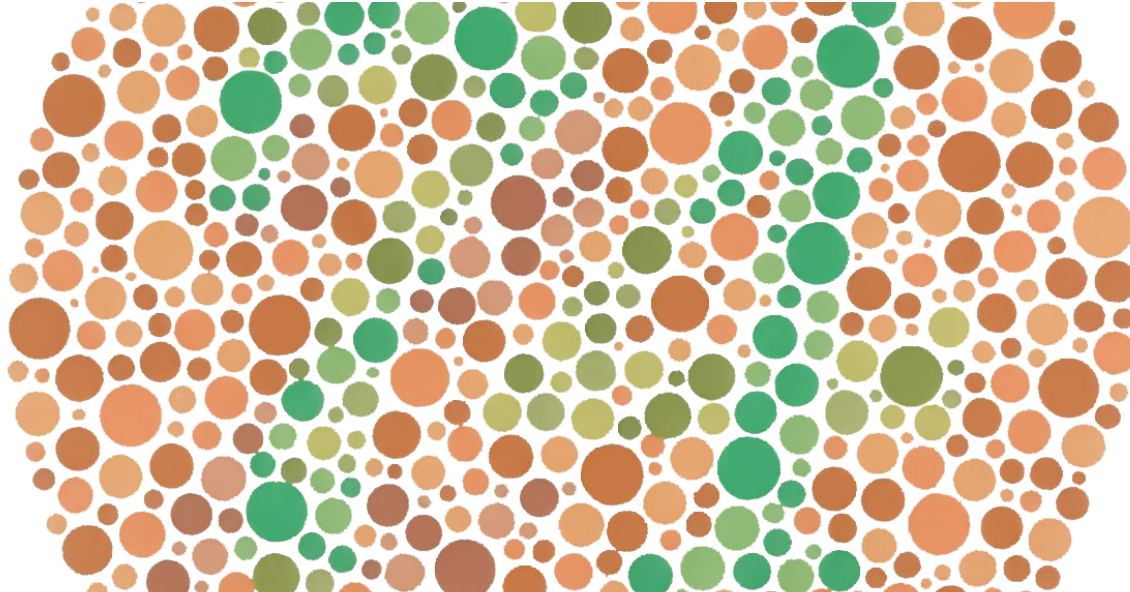
**Visualisation and correction
joint's tension using artificial
spine and AR**



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Ophthalmology in VR (Ishihara, Snellen, squint)



		2	20/100				
			3	20/70			
				4	20/50		
					5	20/40	
						6	20/30

Escape room

- crisis management,
- cooperation with City of Łódź Office

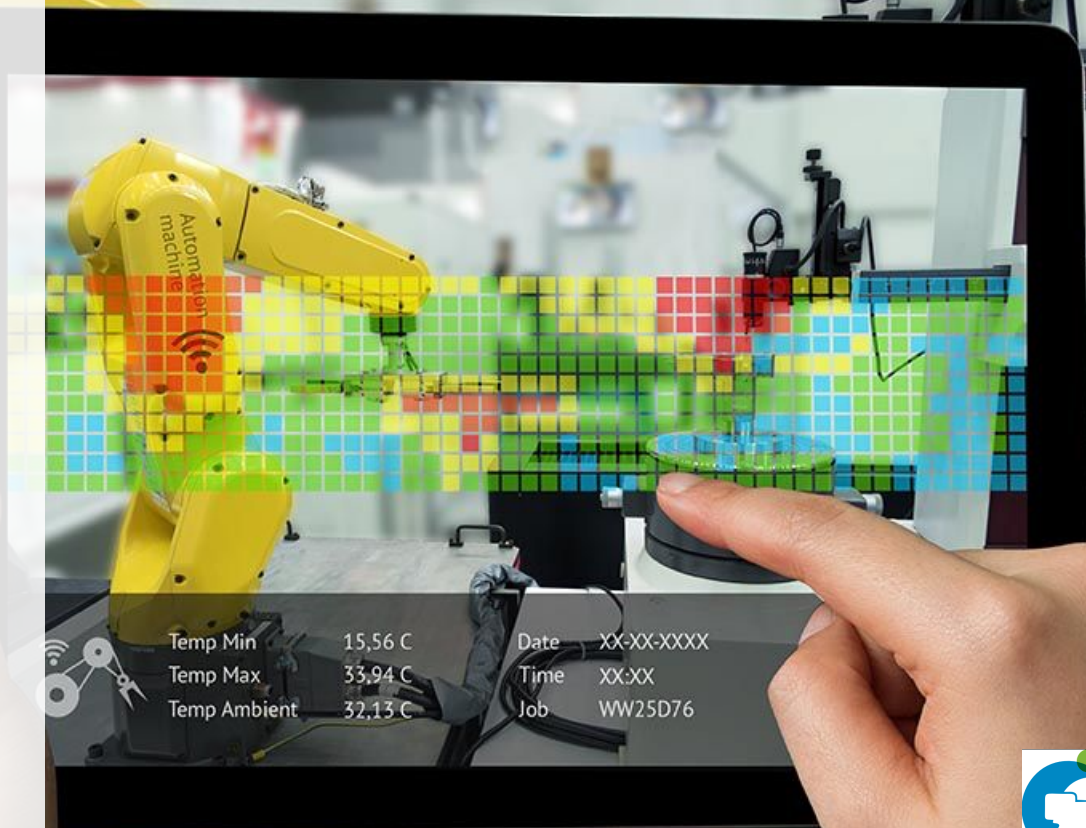


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Thank you!

Time for questions and answers!



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