



# About Us

Voxel Research Lab at Lodz University of Technology is a collaborative initiative that unites academic staff from various departments to pioneer advancements in modern technology, particularly in VR/AR/MR. Our team members have a rich history of participation in both international and national projects that leverage immersive technologies.

Our cutting-edge solutions are designed to make life easier, more efficient, and more productive.

# Who are we for?



For people looking for innovative and effective solutions, struggling with maintaining proper posture, we present our VR Lab's solution aimed at correcting the alignment of the spine and body. Our product provides a fun way of posture correction unlike other conventional treatments. With immersive virtual environments and personalized feedback, users can track their progress and experience tangible results in no time.

# **Product Details**

The measurement system, relies on two key electronic devices. The first is the Head Mounted Display (HMD), responsible for immersing the user in the artifcial environment of the VR application. The Meta Quest 2 HMD kit contains all the components necessary to operate the immersive application independently while accurately positioning the device in a specifc room environment. The six-degrees-of-freedom (6DOF) motion tracking system integrates four-camera optical positioning relative to the user's known environment, and its precision is augmented by additional sensors such as gyroscopes and accelerometers.



## **Product Overview**

 The solution adresses the patients with balance disorders in any age group. The research is conducted with 2 essential partners Polish Mother Center in Łódź and the University Clinical Hospital Norbert Barlicki.

### **Product Features**

- Originality on the market (medical focus in VR)
- Fun way to correct your posture
- Updates to the software available
- Current posture can be monitored at any time

### **Product Benefits**

- Innovative solutions for patient issues
- Product reliability
- Increased patient engagement in treatment process
- Access to the latest software updates
- Adaptability for international markets
- Accurate balance level assessment for medical professionals
- Remote posture monitoring for hospital staff

# **Contact Us**

