

tobii pro

# Eye Tracking in VR

Analysis Tools for VR Environments



Envision human behavior

# Get the most out of your VR projects by adding eye tracking

- Don't guess! See exactly where a participant's attention is focused at all times while inside the VR environment.
- Analyze and understand factors influencing participants' cognitive and decision-making processes.
- Instantly measure, visualize, and compare people's visual strategies and behaviors while they're interacting with products and environments in controlled and safe way.

## How to get started

To benefit from eye tracking technology within virtual reality there are three components that need to be in place: VR content, an eye tracking enabled VR headset, and analysis software.



VR



Eye tracking



Analysis

## VR content

Your VR environment's design and functionality will vary depending on your project needs. The two broad options you have are:

- 360-degree video or images - suitable for browsing studies when you want to understand responses to visual stimuli.
- Unity 3D environment – more suitable for when you'd like to learn how people interact with particular scenarios, navigate spaces, and test non-existing environments.





## Eye tracking enabled VR headsets

To gain objective and reliable insight into human behavior within VR, you need access to high quality eye tracking data. VR headsets with built-in eye tracking technology are becoming more readily available and affordable, making them more accessible to businesses and researchers. However, to unlock their full potential analytical software is needed to allow you to collect, record, and analyze eye tracking data. Check our website to see which headsets are supported by our analysis software solutions.

## Analysis tool

### Tobii Pro VR Analytics

Easily integrated into Unity 3D assets, Pro VR Analytics enables easy recording and analysis of eye tracking and behavioral data, and provides:

- instant access to analytics and visualization output from eye tracking, navigation, and interaction data.
- multiple visualization options including heat maps, opacity maps, gaze vectors, and journey paths.
- eye tracking metrics including fixation counts, total duration of fixations, time to first fixation, time to first fixation and their averages.
- interaction metrics including pickup, time to first pickup, fixation to pickup, and hold time.



### Tobii Pro Lab VR 360 edition

Designed to capture and analyze eye tracking data from 360-degree environments, this plug-and-play software platform :

- supports the entire research workflow including design, recording, and analysis.
- provides essential eye tracking analysis metrics and visualization options including heat maps and gaze plots.
- integrates with GSR for studying emotional engagement or stress levels in conjunction with visual stimuli.
- provides flexible export options for further quantitative and qualitative analysis.



# Application areas

The ability to collect, analyze, and visualize human attention in VR environments creates new opportunities for businesses and researchers.

## Create better customers experiences

In VR you can test products, designs, or communication campaigns in context during the development stage. When combined with eye tracking, you will get insight into how people interact with items, navigate spaces, and perceive messages, allowing you to make more informed business decisions.



## Enhance training

With eye tracking in VR, you get insight into the visual strategies and decision-making processes of individuals within various types of training scenarios. VR allows you to run exercises involving complex, stressful, or dangerous situations without any physical consequences. This facilitates the development of more efficient, engaging, and safe training programs.



## Study phobias and anxiety without actual exposure

Phobias and fears can be researched and treated in a controlled way using VR. The use of 3D or 360-degree content promotes the feeling of immersion while maintaining safety, and the addition of eye tracking provides deeper insights into how people respond to the stimuli.



© TobiiPro®. Illustrations and specifications do not necessarily apply to products and services offered in each local market. Technical specifications are subject to change without prior notice. All other trademarks are the property of their respective owners.

Tobii Pro provides eye tracking research solutions and services designed to deepen understanding of human behavior. Headquartered in Sweden, with local teams active on six continents, we help business and science professionals to further their research.

[tobii.pro](http://tobii.pro)  
[sales@tobii.com](mailto:sales@tobii.com)

**tobii**pro