**ThingLink**

ThingLink is an education technology platform that enables it to augment images, videos, and virtual tours with additional information and links. You can use ThingLink to create accessible, visual learning experiences in the cloud.

Example of the Virtual Tour: **Hybrid Teaching Studio - Otakaari 1 / U134a**

Read more about ThingLink.

**ThingLink Accessibility Statement**

**Instructions for 360° virtual tour productions**

Enhanced 360-degree images environment for

Aalto University - Service Description

Kimmo Kauria 12.09.2022

**Service Description**

Enhanced 360-degree images environment is a platform for all Aalto staff, teachers, students and researchers helping to take 360°-images and -video and make them more accessible to all by editing and publishing them in various forms like virtual tours for eLearning or embedding them to webpages for enhanced visualization and information purposes.

The platform is suitable both for daily teaching needs and more original creative interdisciplinary projects. All of the available 360°-material can also be viewed in metaverse with VR/XR-headsets.

Enhanced 360-degree images environment comprises of several parts:

- 360°-imaging with 360°-cameras like Insta360 Pro 2 with their own control apps on an Android or iOS phone or tablet.
- Stitching the material with Insta360 Stitcher or Studio and editing with Adobe Premier Pro and sorting through images with Lightroom or Bridge.
- Thinglink, a SaaS platform for embedding 360°-images, -video and 3D-elements to webpages. Supports linking with LTI 1.3 for MyCourses material.
- 3DVista, a standalone virtual tour software for more interactive 360°-eLearning environments. Generated virtual tours can be integrated with MyCourses material with JavaScript, as a separate solution.
- TeamWork a secure short to midterm storage for editing 360°-image material and incomplete virtual tours in Aalto local network.
- Aalto hosting for finished virtual tours, for publishing teaching- and other material in the cloud.

For teachers, staff and researchers

- Provides the ability to familiarize with the software and 360°-cameras.
- Developing course material with embedded 360°-images, -video and 3D-models with Thinglink.
- Interactive virtual tours for eLearning, introduction for Aalto spaces and intuitive campus area representation.
- 3DVista virtual tour software available by request through ITS, due to limited licences.
- Regulating visibility and access to 360°-
- Measurable learning and usage metrics.
- Teams group for teachers and staff to exchange information and knowledge.
- A hybrid course in development on all the steps of the process.

For students

- More engaging interactive learning environments to familiarize themselves with the real thing, like a lab or workshop in advance and as a hybrid learning option.
- Experimenting with 360°-cameras and software for student projects and to expand knowledge of the field for future uses.
- Teams group for teachers and students for more hands-on course support.

For all

- Stitching unprocessed 360°-images and -video into workable form with Insta360 Stitcher and Studio.
- Editing images and video; adjusting lighting and colours with Creative Cloud products.
- TeamWork generates a drive restricted for the team members for storing unfinished editing material on a request from IT Service Desk.
- Thinglink for eLearning, embedding 360°-images and video and 3D-models.
- Publish finished 360°-material in cloud and embedding it into webpages.
- Single-sign-on (Aalto Weblogin) for TeamWork, publishing and Thinglink.
- How-to guidance on all the steps from selecting and loaning the 360°-camera to publishing finished material in Aalto Wiki.

Limitations

Due to the approximately 30s lag in processing, Insta360 cameras are a poor fit for real-time video conferencing. This can be circumvented in a conference or teaching environment by posting questions in chat beforehand or answering them later when video is viewed through services like Panopto.

Support and Responsible units of Enhanced 360-degree images environment

- Studios, Takeout for MAGICS 360°-camera rights and support
- LES, Antti Huittinen for Thinglink support
- ITS, Kimmo Kauria and Peter Simonschuk for 3DVista licenses
- ITS, Panu Viitaharju 3DVista support
- ITS, IT Service Desk for TeamWork space
- ITS, Tommi Saranpää Aalto hosting platforms
- LES, Antti Huittinen for hybrid course development for teachers and staff