

HORIZON
2020

AuThoring tooL for indoor Augmented and dimiNished realiTy experlenceS

Résultats

Informations projet

ATLANTIS

N° de convention de subvention: 951900

[Site Web du projet](#)

DOI

[10.3030/951900](https://doi.org/10.3030/951900)

Projet clôturé

Date de signature de la CE

20 Mai 2020

Date de début

1 Juillet 2020

Date de fin

30 Juin 2022

Financé au titre de

INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)

Coût total

€ 1 756 768,75

Contribution de l'UE

€ 1 507 200,63

Coordonné par

JOANNEUM RESEARCH
FORSCHUNGSGESELLSCHAFT
MBH

 Austria

CORDIS fournit des liens vers les livrables publics et les publications des projets HORIZON.

Les liens vers les livrables et les publications des projets du 7e PC, ainsi que les liens vers certains types de résultats spécifiques tels que les jeux de données et les logiciels, sont récupérés dynamiquement sur [OpenAIRE](#).

Livrables

Other (3)



[AI-based indoor scene understanding v1](#)

This deliverable will include the initial version of the different methods and algorithms developed and implemented within this WP.

[AI-based indoor scene understanding v2](#)

This deliverable will include the final version of the different methods and algorithms developed and implemented within this WP.

[Contributions to the XR4ALL platform](#)

Demonstrators and components that are provided to the XR4ALL platform.

Documents, reports (3)

[Validation plan v1](#)

Initial version of the validation plan defining user groups, data sets and evaluation procedures and metrics for function testing and UX evaluation.

[Intermediate outreach report](#)

Report on communication and dissemination activities, setup of collaboration with XR4ALL and updated plans for outreach activities.

[Validation plan v2](#)

Revised version of the validation plan based on the insights from the first evaluation phase

Open Research Data Pilot (1)

[Data management plan](#)

The data management plan will define how the various kinds of data collected and generated in the project will be handled and stored. It also sets the requirements for the data store in terms of data security and privacy protection. It will be maintained as a living document.

Publications

Conference proceedings (6)



ATLANTIS - Indoor Planning with Augmented and Diminished Reality

Auteurs: Werner Bailer, Georg Thallinger, Vasileios Gkitsas, Petros Drakoulis, Antonis Karakottas, Dimitrios Pattas, Dimitris Zarpalas, Brita Piovesan, Robert Huemer, Richard Whitehand, Per Ström

Publié dans: European Workshop on Visual Information Processing, 2022

Éditeur: n/a

A benchmark with decomposed distribution shifts for 360 monocular depth estimation

Auteurs: Georgios Albanis, Nikolaos Zioulis, Petros Drakoulis, Federico Alvarez, Dimitrios Zarpalas, Petros Daras

Publié dans: NeurIPS 2021 Workshop on Distribution Shifts: Connecting Methods and Applications, 2021

Éditeur: n/a

An AI-based system offering automatic DR-enhanced AR for indoor scenes

Auteurs: Georgios Albanis, Vasileios Gkitsas, Nikolaos Zioulis, Stefanie Onsori-Wechtitsch, Richard Whitehand, Per Ström, Dimitrios Zarpalas

Publié dans: 6th International Conference on Artificial Intelligence and Virtual Reality, 2022

Éditeur: AIVR

[Towards Full-to-Empty Room Generation with Structure-aware Feature Encoding and Soft Semantic Region-adaptive Normalization](#) ↗

Auteurs: Vasileios Gkitsas ; Nikolaos Zioulis ; Vladimiros Sterzentsenko ; Alexandros Doumanoglou and Dimitrios Zarpalas

Publié dans: Proceedings of the 17th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications - Volume 4 VISAPP: VISAPP, 2022

Éditeur: SciTe Press

DOI: 10.5220/0010833100003124

[Efficient Instance Segmentation of Panoramic Images of Indoor Scenes](#) ↗

Auteurs: Werner Bailer; Hannes Fassold

Publié dans: Numéro 1, 2022

Éditeur: Verlag der TU Graz

DOI: 10.5281/zenodo.6077859

Indoor Planning Using Diminished and Augmented Reality

Auteurs: Werner Bailer, Hannes Fassold, Vasileios Gkitsas, Petros Drakoulis, Dimitrios Zarpalas, Robert Huemer

Publié dans: Proceedings of XR-WALC Workshop at ACM IMX 2022, 2022

Éditeur: n/a

Peer reviewed articles (2) ▼

[Monocular spherical depth estimation with explicitly connected weak layout cues ↗](#)

Auteurs: Nikolaos Zioulis, Federico Alvarez, Dimitrios Zarpalas, Petros Daras

Publié dans: ISPRS Journal of Photogrammetry and Remote Sensing, Numéro 183, 2022, ISSN 0924-2716

Éditeur: Elsevier BV

DOI: 10.1016/j.isprsjprs.2021.10.016

[Hybrid Skip: A Biologically Inspired Skip Connection for the UNet Architecture ↗](#)

Auteurs: Nikolaos Zioulis, Georgios Albanis, Petros Drakoulis, Federico Alvarez, Dimitrios Zarpalas, Petros Daras

Publié dans: IEEE Access, 2022, ISSN 2169-3536

Éditeur: Institute of Electrical and Electronics Engineers Inc.

DOI: 10.1109/access.2022.3175864

Ensemble de données ▼

Ensemble de données via OpenAIRE (9) 

[Pano3D: GibsonV2 Tiny-Fullplus Filmic High Resolution ↗](#)

Auteurs: Albanis, Georgios; Zioulis, Nikolaos; Drakoulis, Petros; Gkitsas, Vasileios; Sterzentsenko, Vladimiros; Alvarez, Federico; Zarpalas, Dimitris; Daras, Petros

Publié dans: Zenodo

[Pano3D: Matterport3D \(/w Filmic\) High Resolution ↗](#)

Auteurs: Albanis, Georgios; Zioulis, Nikolaos; Drakoulis, Petros; Gkitsas, Vasileios; Sterzentsenko, Vladimiros; Alvarez, Federico; Zarpalas, Dimitris; Daras, Petros

Publié dans: Zenodo

[Pano3D: Matterport3D Stereo Low Resolution ↗](#)

Auteurs: Zioulis, Nikolaos; Alvarez, Federico; Zarpalas, Dimitris; Daras, Petros

Publié dans: Zenodo

[Pano3D: GibsonV2 Tiny-Medium-Fullplus High Resolution ↗](#)

Auteurs: Albanis, Georgios; Zioulis, Nikolaos; Drakoulis, Petros; Gkitsas, Vasileios; Sterzentsenko, Vladimiros; Alvarez, Federico; Zarpalas, Dimitrios; Daras, Petros

Publié dans: Zenodo

[Pano3D: GibsonV2 Full Low Resolution ↗](#)

Auteurs: Albanis, Georgios; Zioulis, Nikolaos; Drakoulis, Petros; Gkitsas, Vasileios; Sterzentsenko, Vladimiros; Alvarez, Federico; Zarpalas, Dimitrios; Daras, Petros

Publié dans: Zenodo

[Pano3D: GibsonV2 Full High Resolution ↗](#)

Auteurs: Albanis, Georgios; Zioulis, Nikolaos; Drakoulis, Petros; Gkitsas, Vasileios; Sterzentsenko, Vladimiros; Alvarez, Federico; Zarpalas, Dimitrios; Daras, Petros

Publié dans: Zenodo

[Pano3D: Matterport3D \(/w Filmic\) Low Resolution ↗](#)

Auteurs: Albanis, Georgios; Zioulis, Nikolaos; Drakoulis, Petros; Gkitsas, Vasileios; Sterzentsenko, Vladimiros; Alvarez, Federico; Zarpalas, Dimitris; Daras, Petros

Publié dans: Zenodo

[Pano3D: GibsonV2 Tiny-Medium-Fullplus \(/w Filmic\) Low Resolution ↗](#)

Auteurs: Albanis, Georgios; Zioulis, Nikolaos; Drakoulis, Petros; Gkitsas, Vasileios; Sterzentsenko, Vladimiros; Alvarez, Federico; Zarpalas, Dimitrios; Daras, Petros

Publié dans: Zenodo

[Pano3D: Matterport3D Semantic & Layout Low Resolution ↗](#)

Auteurs: Zioulis, Nikolaos; Alvarez, Federico; Zarpalas, Dimitris; Daras, Petros

Publié dans: Zenodo

Autres produits de recherche

Autres produits de recherche via OpenAire (1)



[Efficient Instance Segmentation of Panoramic Images of Indoor Scenes ↗](#)

Auteurs: Bailer, Werner; Fassold, Hannes

Publié dans: Zenodo

Dernière mise à jour: 27 Decembre 2023

Permalink: <https://cordis.europa.eu/project/id/951900/results/fr>

European Union, 2025