Data4XR: Datasets for Developing Intelligent XR Applications

CALL FOR PAPERS

Important dates

9.Jan.2023- Submission deadline
20.Jan.2023- Notification
3.Feb.2023 - Camera-ready deadline

Invited speaker

To be invited

Whenever AI researchers want to propose different data-driven models, datasets are the most fundamental resources. With easy access to standard datasets, they can develop state-of-the-art AI algorithms to achieve excellent prediction performance. However, when XR researchers decide to import these algorithms for developing intelligent immersive interactive applications, the lack of publicly available datasets arises as a challenge despite advanced AI algorithms being developed.

Many works related to datasets have been published, e.g., MINIST, ImageNet, CIFAR-10, etc. To unleash the full power of XR, the community also needs standard datasets for developing data-driven models with machine/deep learning. The 2nd workshop on Datasets for Developing Intelligent XR Applications (Data4XR), hosted by the IEEE VR 2023, proposes a meaningful platform for domain researchers to find valuable resources and develop collaborations across labs. It aims to promote XR research by involving artificial intelligence.

The workshop invites researchers to submit 1) technical papers aimed towards introducing their published datasets that can be easily accessed and used to develop data-driven models, 2) position papers describing ethics, early-stage concepts, preliminary ideas for sharable datasets creation and standardization, 3) research papers that integrate data-driven models into XR studies. The submission could be 4-6 pages on any of the following topics but not limited to:

- Multisensory interfaces and rendering
- Multimodal/cross-modal interaction, perception, and cognition
- 3D user interaction and experience
- Intelligent concurrent engineering
- Digital twin model use cases
- Interactive simulation models and algorithms
- Adaptive VR/AR interaction frameworks
- Interactive reasoning for intelligent user interaction feedback in VR/AR
- Human factors and ergonomics
- User modeling and computational interaction
- Data ethics and protection in XR

Organizers

Yuyang Wang
Hong Kong Uni. of Science and Technology (Guangzhou)
yuyangwang@ust.hk

Jean-Rémy Chardonnet
Arts et Métiers Inst.
of Technology
jean-remy.chardonnet@ensam.eu

Lik-Hang Lee
Korea Advanced Inst.
of Science and Technology
likhang.lee@kaist.ac.kr

Pan HUI
Hong Kong Uni. of Science and Technology (Guangzhou)
panhui@ust.hk