

## Call for Contributions

**1. Inform the Chair:** with the title of your contribution

**2. Submission URL:**

<https://www.ariasubmit.org/conferences/submit/newcontribution.php?event=AIVR+2025+Special>

Please select Track Preference as **xRBCAP**

**3. Note:** *For 2025, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on site scientific events. However, we are ready to adapt any which way the conditions dictate.*

Special track

## **xRBCAP: VR/AR/XR/MR Environments for Studying Functional Brain Changes in Aging Population**

**Chair**

Prof. Dr. Zahra Moussavi, University of Manitoba, Canada

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along with

**AIVR 2025: The Second International Conference on Artificial Intelligence and Immersive Virtual Reality**

<https://www.aria.org/conferences2025/AIVR25.html>

April 6 - 10, 2025 - Valencia, Spain

This special track will explore the use of cutting-edge technologies such as Virtual Reality (VR), Augmented Reality (AR), Extended Reality (XR), Mixed Reality (MR), and Immersive Virtual Reality (IVR) to investigate functional changes in the brain as we age. By leveraging these advanced environments, researchers and clinicians can create highly controlled, interactive, and engaging simulations to study cognitive decline, motor function, and neural plasticity in older adults. These technologies offer unprecedented opportunities to monitor brain function dynamically, enabling more accurate assessments of how aging impacts cognitive and motor abilities.

The sessions will showcase current applications, discuss challenges in implementation, and highlight future research directions for using these immersive technologies to advance the understanding of brain aging and develop novel interventions for cognitive health.

**Subtopics for contributions include, but are not limited to:**

- VR/AR tools for cognitive assessment and/or treatment
- Users experience design and feedback for elderly in XR
- Real-time challenges in monitoring of brain activity in MR Environments
- Experiences on brain activity and neuroplasticity in **older adults**
- Immersive therapies for age-related neurodegenerative disorders
- Comparative studies on VR vs. non-VR cognitive rehabilitation
- VR exposure therapy for anxiety and depression in older adults
- Impact of Long-Term XR Use on cognitive function for seniors
- Safety and risks of VR/AR in physical rehabilitation for the older adults
- Ethical considerations and privacy in using XR with aging populations

## Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on [www.iaia.org](http://www.iaia.org)]
- Presentations: slide only [slide-deck posted on [www.iaia.org](http://www.iaia.org)]
- Demos: two pages [posted on [www.iaia.org](http://www.iaia.org)]

## Important Deadlines

Inform the Chair or Coordinator: As soon as you decide to contribute

Submission: Feb 15, 2025

Notification: March 7, 2025

Registration: March 19, 2025

Camera-ready: March 19, 2025

*Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chairs.*

## Paper Format

- See: <http://www.iaia.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaia.org/editorialrules.html>

## Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iaiajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the Open Access ThinkMind Digital Library: <http://www.thinkmind.org>

## Paper Submission

<https://www.iaiasubmit.org/conferences/submit/newcontribution.php?event=AIVR+2025+Special>

Please select Track Preference as **xRBCAP**

## Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaia.org/registration.html>

## Contacts

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