



Call for Papers: Workshop on Combining Mixed Reality and Brain-Computer Interfaces: Challenges and Opportunities (MR&BCI) @ ISMAR 2020

In the context of Mixed Reality (MR), a neural user interface (or Brain-Computer Interfaces, BCI) can either be used as an explicit input modality (e.g. for entry of text or commands) or as an implicit channel to proactively adapt the 3D user interface, reducing the need for manual adjustments by the user or by the designer. Beyond real-time applications, neural and physiological data can also be used for evaluation purposes to test and improve MR interfaces and interaction paradigms, giving continuous data for important aspects of user experience which can be hard to assess otherwise, such as presence, workload, or attention. The topic of bringing MR technologies together with neural and physiological data is gaining more and more interest in the field as the necessary technical components are becoming more mature and widespread. Both areas are complex and fast-moving in themselves, i.e. very few researchers are experts in both fields equally. Therefore, matchmaking between researchers from MR and researchers from neural and physiological interfaces should lead to fruitful collaborations and important scientific and practical exchanges between both fields.

In this workshop, at the ISMAR 2020, we will feature presentations of original research, work-in-progress, tools and data sets, as well as challenge and perspective papers on the combination of neural and/or physiological interfaces with MR technologies and applications. Given the restrictions on research involving participants during the COVID-19 pandemic, we also encourage interested participants to submit synthesizing works (e.g., reviews and meta-analyses) or planned and formally preregistered studies of relevance.

Organizers:

- Felix Putze, University of Bremen
- Hakim Si-Mohammed, University of Lille
- Anatole Lécuyer, Inria Rennes
- Lisa-Marie Vortmann, University of Bremen

The workshop will be organized – like the main conference – as a virtual event. Manuscripts should be submitted in VGTS template as provided by the ISMAR main conference at <http://ismar20.org/submission-guidelines/>. Submissions can be between 2 (e.g. demo or tool descriptions) and 10 pages (full research papers). Submissions will be handled in a double-blind review process; each submission is reviewed by at least two external reviewers. You can submit your contribution here: <https://cmt3.research.microsoft.com/ISMAR2020>

See also our workshop website to keep up to date about news regarding the submission process, announcement of keynote speakers, the workshop program and other important information: <https://www.uni-bremen.de/csl/ismar-mr-bci-workshop-2020>

Submission deadline: August 21th, 2020

Notification of acceptance: September 11th, 2020

Camera-ready manuscript due: September 21st, 2020

Workshop date: November 9th or 13th, 2020