Towards novel and efficient subjective and objective quality assessment methodologies for augmented reality scenarios.

A three-year PhD position (part of the REALISME project aims to provide a set of tools and paradigms to assess QoE and identify areas for improvement to minimize discomfort) focused on subjective and objective quality assessment for augmented reality is available. This two-fold project aims to define an adapted paradigm for subjective assessment to measure the quality of experience of users in AR scenario. The collected knowledge will be used as a ground truth for the development of efficient and adapted objective quality assessment metrics based on both recent advances of deep neural networks and perceptual models.

Besides the general-purpose application of AR, the output of this PhD will be exploited in the framework of the REALISME project dedicated to scars acquisition, modeling, and synthesis. Therefore, both subjective and objective methodologies will be used to evaluate the rendering of scars and their evolution using augmented reality. The aim is to help improving the user interface and to tune the rendering process to guarantee the quality of experience to the user.

The position is a co-tutelle between the University of Poitiers (France) and the Norwegian University of Science and Technology (NTNU), awarding the successful candidate with a PhD degree from each University. The candidate will work with a team of experienced researchers from XLIM and the Colourlab in Gjøvik and will be co-supervised by Prof Chaker Larabi (XLIM) and Dr Seyed Ali Amirshahi (Colourlab).

The ideal candidate will have a strong background in signal processing or a related field, very good programming skills, as well as a keen interest in visual perception and the processing of visual information.

Selection of the candidate will be based on motivation, adequacy of profile and experience, as well as grades. Furthermore, the selected candidate must pass security clearance procedures at both universities.

The application **must** include:
- A cover letter where the applicant describes his/her personal motivation and relevance with respect to the requirements of the position.
- CV.
- Transcripts and diplomas for bachelor's and master's degrees (or an official letter stating the approximate date of graduation).
- Name and contact information of three referees.

Applications should be submitted via email to both chaker.larabi@univ-poitiers.fr and s.ali.amirshahi@ntnu.no with the subject "**Application for PhD in Quality assessment methodologies for augmented reality**" by April 30th, 2023.