

## **Call for Submissions: special issue on Human Centered Virtual and Augmented Geovisualization Environments by the International Journal of Digital Earth (IJDE).**

Recent developments in 3D virtual reality (VR) and augmented reality (AR) technologies rekindled some excitement in various scientific domains, including geographic information science (GIScience). Even though much of the VR/AR developments have been technology-driven, the opportunities for GIScience research and application are vast, and may result in nothing less than a paradigm shift in how we communicate and understand spatial environments.

The immersive but relatively unconstrained nature of these environments allow for the exploration of unreachable spaces (e.g. under the oceans, Mars explorations) and times (e.g. historical Rome) in engaging and natural ways. Thus, the concept of a “digital earth” is possibly best actualized through VR/AR. We are keen to document the state of the art and case studies in science featuring VR and AR.

Thus, this special issue on **Human Centered Virtual and Augmented Geovisualization Environments** by the *International Journal of Digital Earth (IJDE)* addresses user-centered visualization theories, concepts and applications that are related to VR/AR. Contributions to the special issue should report on unpublished research that advances the theory, design and technological implementation of new, cutting-edge human-centered augmented and virtual geovisualization environments.

More specifically, we solicit original, state-of-the-art research that is linked to geographic information science, spatial cognition and human-computer interaction. The case studies may demonstrate the use of a variety of display paradigms in different domains, usability issues, and benefits and drawbacks of VR/AR in the above-listed domains.

### **Potential topics include, but are not limited to, the following:**

- Human-centered design principles for VR and AR
- Frameworks and workflows for 3D environmental modeling for built and natural environments
- Agile/user-centered software and hardware development case studies
- Empirical studies with VR and AR: usability, user experience, perceptual and cognitive experiments
- Human-computer interaction in VR and AR
- Spatio-temporal data visualization in VR
- Big data visualization and visual analytics in VR
- Applications of VR and AR in GIScience and related domains

## **Submission Guidelines**

Website: <http://explore.tandfonline.com/cfp/est/ijde/si-2>

Submissions must follow the instructions to authors outlined on the Taylor & Francis web page for the *International Journal of Digital Earth* found: [here](#). Both word and LaTeX templates are available on the web site and papers are typically 5000-8000 words in length.

Papers should be submitted online at the International Journal of Digital Earth's Manuscript Central Site: [here](#). New users should first create an account. Once a user is logged onto the site submissions should be made via the Author Centre.

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**\*Please indicate the paper is submitted to Special Issue on “Human-Centered Virtual and Augmented Geovisualization Environments” in the cover letter.**

The special issue will include a maximum of 8 papers.

We look forward to your contributions. Please do not hesitate to contact the Guest Editors in case of questions.

**Important Dates:**

**Submission of manuscripts: 31 August 2017**

**Final notification of acceptance/rejection: 28 February 2018**

**Planned publication of special issue: Mid 2018**

## **Editorial information**

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