

# Postdoctoral positions in Virtual and Augmented Reality and Interactive Technologies

Emerging Analytics Center  
University of Arkansas at Little Rock

The Emerging Analytics Center (EAC) at the University of Arkansas at Little Rock (UALR) has **two (2) 3-year funded Postdoctoral Research Associate positions** in the areas of virtual and augmented reality and interactive technologies.

We are seeking highly creative and motivated individuals that would like to start their research career in VR/AR at the EAC. Candidates need to have a strong background in interactive computer graphics or related fields (Gaming, HCI, virtual reality); good programming skills and experience in C++, Python, OpenGL; and, familiarity with visualization tools and game engines (ranging from tools such as Paraview, VMD, ArcGIS, to Unity and Unreal Engine). Candidates must have a strong level of spoken and written English and must be able to work both independently and in a team in a multidisciplinary environment. The positions have a great deal of flexibility for candidates to pursue research in areas of their interest. Candidates will also have the opportunity to define technology acquisitions at EAC in order to support research activities. *There could be a possibility of transferring to a tenure-track faculty position at the completion of the postdoctoral work.*

Candidates will work under the direction of Dr. Carolina Cruz-Neira and Dr. Dirk Reiners in a variety of applied research projects in virtual reality, augmented reality, visual analytics, modeling and simulation, and training. One of the primary expectations for candidates is their ability to generate publishable papers from the research projects under their responsibility.

## About the Emerging Analytics Center

The EAC is a new research center focused on applied research in visualization for a wide range of disciplines. The center has a strong multi-disciplinary base of faculty, researchers and students addressing a diversity of challenges through the application of virtual reality, mixed reality and visualization. One of the unique aspects of EAC is that it acts as a “knowledge-broker” between faculty expertise and industry and government R&D needs. EAC has a core group of members, but it also draws faculty from the entire campus as needed for each project opportunity. As a consequence, another unique aspect of EAC is its ability to perform highly multi-disciplinary research towards the design, development, and deployment of applied research products to be utilized outside the research community and integrated into industry workflows. EAC is a focus of expertise as well as a focus of technology transfer. Research results are disseminated through traditional venues such as publications, patents, and spin-offs as well as through Open Source products and an expertly-trained workforce targeting specific industry segments.

## EAC's Infrastructure

- 26-projector CAVE immersive visualization system
- Two Oculus Rift helmets
- Two HTC Vibe
- Several Samsun Gear VR with appropriate phones
- Large touch stereoscopic table & configurable wall
- 25-foot diameter stereoscopic dome
- Two Microsoft Hololens
- Two Meta VR Helmets (pending)
- Cyberith Omnidirectional treadmill
- Glyph, drones, tablets, 3D & 360 cameras

The EAC has High- Performance Computing capabilities, having direct access to a 512-core system and to a 4TB, 80-processor system, both located at the UALR Computational Research Center. Furthermore, EAC is connected to the nation's high-speed fiber optic backbone with four dedicated 10Gb lines with fast access to larger-scale HPC facilities.

**Application:** please email a cover letter, CV, and at least two reference contacts to Dr. Carolina Cruz-Neira, [cxacruz@ualr.edu](mailto:cxacruz@ualr.edu)