Postdoctoral Position in Immersive Visualization and Interactive Technology

UA LITTLE ROCK GEORGE W. DONAGHEY EAC
EMERGING ANALYTICS CENTER

The Emerging Analytics Center (EAC) at the University of Arkansas at Little Rock (UA Little Rock) offers **one (1) 2-year funded Postdoctoral Research Associate** position (R0011985) in the areas of immersive visualization and interactive technologies. The position can be extended after the initial 2-year period up to an additional year.

We are seeking highly creative and motivated individuals that want to start their research career in immersive visualization at the EAC. Candidates need to have a strong background in interactive computer graphics or related fields (e.g., gaming, HCI, virtual/augmented/mixed reality), good programming skills and experience in C++, Python, shader-based 3d graphics APIs, and familiarity with visualization tools (e.g., Paraview, VMD, ArcGIS) and/or game engines (e.g., Unity3d, Unreal Engine). Candidates must have a strong level of spoken and written English. They must be able to work both independently and in a team within a multidisciplinary environment. The position provides much flexibility for candidates to pursue research in areas of their interest. Candidates will also have the opportunity to define technology acquisitions at the EAC in order to support research activities. There is 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. Jan P. Springer in the context of an NSF EPSCoR funded project at the intersection of immersive visualization, virtual/augmented/mixed realities, visual analytics, and simulation and training. One of the primary expectations for candidates is their ability to generate publishable results from the research projects under their responsibility. Compensation includes a competitive salary and benefits as a full-time employee at UA Little Rock.

About the Emerging Analytics Center

The EAC is a research center focused on applied research in visualization for a wide range of disciplines. The center has a strong multidisciplinary base of faculty, researchers, and students addressing a diversity of challenges through the application of virtual/augmented/mixed reality technologies and immersive as well as traditional visualization methods. One of the unique aspects of EAC is that it acts as a *knowledge broker* between faculty expertise and R&D needs in industry and government. The 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 the EAC is the ability to perform highly multidisciplinary research towards the design, development, and deployment of applied research products to be utilized outside the research community and integrated into industry workflows. The EAC is a focal point of expertise as well as has a focus on 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.

The EAC's infrastructure includes:

- 26-projector CAVE immersive visualization system
- Large touch stereoscopic table & configurable wall
- Various Head-mounted helmets (Oculus, HTC Vive, HoloLens, Magic Leap)
- Mobile low-cost CAVE-like system
- Cyberith Omnidirectional treadmill
- Glyph, drones, 3D & 360 cameras
- Phones, tablets, gadgets, ...

The EAC maintains high-performance computing capabilities with direct access to a 512-core system and a dedicated 4TB, 80-CPU system. The EAC is connected to the nation's high-speed fiber optic backbone with fast access to larger-scale HPC facilities.

Application: please email a cover letter, a CV or resume, and (at least) two reference contacts to Dr. Jan P. Springer at jpspringer@ualr.edu.