PhD Student 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 **multiple 3- and 4-year fully funded PhD student positions** in the areas of virtual and augmented reality and interactive technologies.

We are seeking highly creative and motivated individuals that would like to pursue a PhD degree in our center. These 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.

Academically these positions are under the department of Information Sciences, although based on the candidate's background it could be possible to place the positions under other academic departments

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.

About the Emerging Analytics Center

The EAC at UALR 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

- A 26-projector CAVE immersive visualization system
- A 25-foot diameter stereoscopic dome
- Two Oculus Rift helmets
- Two Microsoft Hololens
- Two HTC Vibe
- Several Samsung VR Gear
- One Cyberith omnidirectionalTreadmill
- A large touchable table and reconfigurable wall
- Several auto-stereo tablets and mobile devices, several ground and air drones, and many other "gadgets."

The EAC also 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, cxcruz@ualr.edu