Carolina Cruz-Neira, director of the Emerging Analytics Center at the University of Arkansas at Little Rock, promises a show people will remember when her team hosts an open house on Oct. 16-17 to showcase the latest virtual reality technology.

Cruz-Neira was brought to Little Rock in the summer of 2014 as part of the Arkansas Research Alliance Scholars program to direct the newly opened EAC. Since her arrival, Cruz-Neira has been busy expanding the center and implementing the virtual reality tech that she invented. The open house will showcase the most up-to-date VR as well as hint at what’s to come.

The VR tech at UALR has multiple applications, from military to health care. The system also boasts applications for local businesses, which will have access to the technology for design and data analytics services.

The open house, "Discover Virtual Reality," is free and will include 15 demonstrations of the VR technology. Those interested in attending are asked to make reservations. More information is available at EAC.UALR.edu.

Cruz-Neira has been on the forefront of VR for years. Before joining UALR, she established the Virtual Reality Applications Center at Iowa State University and the Louisiana Immersive Technologies Enterprise at the University of Louisiana at Lafayette.

Later this month, she will present at the Virtual Reality Summit in Santa Clara, California, joining a roster that includes some of the country's most respected VR experts, representing firms like Adobe and schools like the University of Southern California.

Last year, Cruz-Neira led an EAC contingent to an international VR conference in France where her husband, Dirk Reiners, associate professor of information science at UALR and a member of the EAC team, led a 2-day session on VR software infrastructure.

The addition of Cruz-Neira to lead the EAC has placed UALR in position to emerge as a leader in the VR field, and Cruz-Neira is eager to unveil her team's work at the open house. She wants the community to know the unveiling will be worth the wait.

"We're looking forward to finally being able to showcase the kinds of things we can do," she said. "My hope is that the open house will help the community to build a little collective ownership in the EAC program, and in UALR. We want the people of
Little Rock to have something else in addition to the Razorbacks and sports to be proud of."

The EAC technology, specifically the Cave Automatic Virtual Environment (CAVE), can be used in about 25 disciplines including large-scale, customized systems to "everyday portable technologies" such as smart phones, glasses and tablets.

Friday's sneak peek offered a glimpse into a VR program that enables engineers to equip military aircraft with specific equipment. The technology can also create virtual buildings and a 3D human body that students can walk through. With CAVE, users can be inside their subject matter instead of merely looking at data, renderings or flat images.

The open house will represent the culmination of a year's work to get the center ready.

"There are not many universities in the U.S. that have a place like this," she said. "The Little Rock community needs to be aware we have such a place and that they are always welcome to come and see what's happening. I want the community to come see us with the same excitement they have when they go see a football game when it comes to town. Our open house brings the EAC to town."

The EAC has grown to include about 25 students, many of them international, and five full-time faculty members. In addition to Cruz-Neira and Reiners, whose expertise is in interactive and 3D graphics, the EAC team includes Senior Visualization and Operations Manager Tom Coffin, Senior Research Scientist Carsten Neumann, Lead Artist Jason Zak and Program Coordinator Kendra Boyle.

The student count at the EAC is up from just a handful last year, and Cruz-Neira is eager to mine Arkansas for more.

"We're making a conscious effort to attract local talent," she said. "I know it's there. We just have to find it."

The VR program also is attracting multi-disciplinary students from across campus. The center is equipped to serve UALR students and researchers who can apply the EAC’s modeling and simulation, visualization and systems integration through a multitude of disciplines.

Plus, local businesses will have access to services such as data visualization, data analytics, training environments, software architectures for visualization and virtual reality, technology development, modeling and simulation, museum installations and tech transfer.
In addition to helping local businesses with smaller-scale projects, Cruz-Neira said she'll go after large international customers such as those found in the defense and health care industries.

"I want to grow the EAC at UALR, so I'm going after the large-scale projects," she said.

Cruz-Neira, born in Venezuela and raised in Spain, is ready to settle down in Little Rock. She told Innovate Arkansas last winter that her family loves Little Rock and is ready to "drop anchor."

The open house will begin the process of community awareness and ultimately, pride in the EAC, she believes. But to help the cause, Cruz-Neira, whose credentials attest to intelligence and expertise, was street-smart enough to schedule the open house for a weekend when the Hogs have an open date. She refers to the open house as "showtime."

"We want the city to know that we're here and want people in Little Rock to 'own' us like they would a sports team," she said. "We want this to be one more point of pride for the city."

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