UALR DOCTORAL STUDENT WINS AWARD IN VIRTUAL REALITY COMPETITION

A doctoral student at the University of Arkansas at Little Rock has won the community favorite award for his pottery-making virtual reality application.

"PotelRVR is a mix between a simulator and entertainment system for letting people engage their creativity through pottery making," said Juan Munoz, a first-year doctoral student in integrated computing.

His program, PotelRVR, won the community favorite award in the Leap Motion 3D Jam competition. In addition, the app has also been selected as one of eight projects that will be on display at the Laval Virtual show, which showcases innovations and new technologies focusing on virtual reality and augmented reality, March 23-27 in Laval, France. Eight organizations will present their apps during the five-day show and compete for a chance to win the Best VR/AR Contents Award.

Munoz, a Colombia native designed PotelRVR as a class project in Dr. Carolina Cruz-Neira's virtual reality graduate class and created the app in UALR's George W. Donaghey Emerging Analytics Center. The app has a unique feature, which allows users to not only create pottery in the virtual world, but also to print their creations using a 3-D printer.

"Normally, we bring the real world into the virtual, but this is the reverse," said Cruz-Neira, director of the Emerging Analytics Center. "We are able to bring the virtual into the real world through 3-D printing. Potel gives us a virtual lump of clay, and you can use your
hands as you would in real life and shape that clay. The cool part is once
you finish your art piece in the virtual world, you can get it out of
the virtual world by printing it on a 3-D printer.”

More than 1,900 developers from 89 countries submitted over 180
entries competing for $75,000 in cash and prizes during the Leap
Motion 3D Jam. Over six weeks, members of the Leap Motion
community downloaded the contest entries and voted for their
favorites via social media. Munoz’s project was voted one of two
audience favorites. He won a $500 prize and a free license for Unity,
professional gaming software valued at $2,000.

One of the most challenging aspects of creating the app was building
hardware that allows the user to experience the physical feeling of
shaping clay in a virtual world.

“We needed a sensory device to let users know they were touching
the clay in the virtual world,” Munoz said. “We created a custom
hardware for the application, so when your hand is close enough to
the virtual clay, small vibrators in your hand are activated so that you
know you are touching the clay.”

This virtual reality app requires the use of an Oculus Rift DK2 and a
Leap Motion controller. To learn more about PotelRVR, visit
https://developer.leapmotion.com/gallery/potelrvr

Photo upper right: UALR doctoral student, Juan Munoz, wins
audience favorite award in the Leap Motion 3D Jam Competition with
his virtual reality app, PotelRVR. Photographed in the Emerging
Analytics Center, Engineering and Information Technology Building
on February 4, 2016. Photo by Lonnie Timmons III/Office of
Communications.