Creating a virtual reality
Mizzou grad student uses computer science to help children with autism

Story by Brian Consiglio, strategic communication

Virtual reality is an innovative technology that is typically associated with light-hearted fun, such as video games or 3-D movies. But at the University of Missouri, graduate student Sai Shreya Nuguri is using it for so much more.

“My area of interest in grad school focuses on the creation of vSocial, a virtual reality learning environment for children with autism,” Nuguri said. “At Mizzou, I’m able to combine existing areas of research, including Dr. Calyam’s work on cloud and virtualization, Dr. Henry’s work on pose estimation and Dr. Stichter’s work on iSocial.”

Nuguri, who is seeking her master’s in computer science from the College of Engineering, came to Mizzou to work with her mentor, Prasad Calyam, assistant professor in the Department of Electrical Engineering and Computer Science. Calyam mentors students in virtualization, multimedia and networking and teaches cloud computing courses to engineering students as well.

“The cutting-edge, futuristic projects he conducts in his lab allows me to work with brilliant minds to make a difference that will help people with autism,” Nuguri said.

In the past, Nuguri has worked with students from the Research Experience for Undergraduates summer program. She currently is working with two undergraduates, Weston Verhulst and Roland Oruche, on her vSocial project.

“Brainstorming, developing and conducting various tests with these undergraduate students have been some of my favorite memories at Mizzou,” Nuguri said.
In addition to working with other students, Nuguri has collaborated with Henry He from the Department of Electrical Engineering and Computer Science, and Janine Stichter, a professor of special education. Stichter, who adopted a son with autism and cognitive impairments, serves as an associate director in the Thompson Center for Autism and Neurodevelopment Disorders.

Nuguri credits Mizzou for providing her with hands-on learning experience that will help her excel in her field.

“Nothing beats experience!” Nuguri said. “Working with professors on projects has allowed me to gain experience and grow professionally.”

Topics: Mizzou Made, Research, Students