College of Engineering and Computer Science







DIRK REINERS

Associate Professor, Information Sciences University of Arkansas at Little Rock

STAYING ON TOP OF THE DATA REVOLUTION: TAMING DATA THROUGH INTERACTIVE AND IMMERSIVE VISUALIZATION

The definition of what constitutes a large data set has changed significantly over the last 20 years, and more and more scientific fields and industries generate more and more data every year. What has not changed is the need to explore, analyze and communicate that data in an efficient and effective manner. One of the most promising ways to explore, understand and present data is the use of interactive visualization and virtual and augmented reality. But now the challenge moves from being able to handle large data at all to being able to do it fast enough to enable users to interact with it, if possible in real-time with no perceptible delays. This can only be done by considering every aspect of the system, both hardware and software, and focusing on the goal of providing the best possible experience to the user, to gain the most value from the data at hand. This talk presents a selected group of projects in which multidisciplinary teams of researchers and industry experts have addressed challenging problems through innovative visualization technologies, methods and applications, in a wide variety fields from automotive design to military training, industrial simulation and population data analytics.

Dirk Reiners, Ph.D., is a faculty member in the Department of Information Science at the University of Arkansas at Little Rock. He has a Master and PhD degree from the Technical University of Darmstadt, Germany. Before joining academia, he worked for more than 10 years at the Fraunhofer Institute for Computer Graphics, the largest research group in the world for computer graphics, leading a variety of industry and public research projects in virtual and augmented reality and directing the development of the OpenSG system. As an academic, he has received several best paper awards, over \$15 million in funding, and several patents and Open Source licenses.

TUESDAY, SEPT. 24, 2019 10:45 - 11:45 A.M.

WHERE:

Harris Engineering Center, Room 101 University of Central Florida Main Campus 4328 Scorpius Street, Orlando 407-823-2156

