

SAGE2 Training Workshop – Immersive Visualization with Scalable Resolution Shared Displays (SRSD)

June 8, 9AM – 12:30AM

Troves of big data are invaluable to all sectors of society, however deriving insight and understanding from such data requires interdisciplinary efforts and next generation technologies. One way to achieve this, is through the use of interactive visualization environments that can immerse the user in data and provide tools for data analytics. Thus, visualization can be considered a digital “lens” for big data from any discipline. It is especially valuable for researchers situated at distributed centers in Pacific Rim countries for data intensive applications including, but not limited to, natural disaster management, smart cities, sustainable water systems, climate change, and the creative arts.

The first part of this proposed session will provide information on Scalable Resolution Shared Display (SRSD) environments. These environments have been shown to significantly improve data analysis with greater speed, accuracy, comprehensiveness, creativity, and confidence. We are developing applications on a SRSD middleware called Scalable Amplified Group Environment (SAGE2). We will present a series of application examples that investigate the applicability of new immersive visualization technologies for presenting combinations of 2D and 3D representations of data and the broader value of immersive visualization for different domains.

The second part of this session will feature hands-on training to experience SAGE2 enabled visualization environments. We will have attendees go through a brainstorming session on SAGE2 that will highlight some of the features of these visualization environments. We expect ultimately that attendees will develop an understanding of how we are adding “smartness” to enable better use of SRSD and the potential of these environments for data intensive science.