

Information Science and Technology Seminar Speaker Series



Dr. T. Alan Keahey

Vice President, Conversant Media

Bridging the Scale Gap Between Visual Perception and Big Data

Wednesday, July 12, 2017

3:00pm - 4:00pm

TA-3, Bldg. 1690, Room 102 (CNLS Conference Room)

Abstract: The human visual perception system is the highest bandwidth sensory channel that we have for ingesting information. It provides unique features of instant feature and pattern recognition that scale well to human-scale datasets. However, the scalability of our visual perception is not infinite, and the limits of it are reached well before we reach the sizes seen in typical "Big Data" applications. There are a number of scalability factors that affect our ability to view larger datasets, including perceptual, visual, interaction, display, analytical scale and available time. This talk will explore some of these differences in scale, and show how a variety of visual and analytical techniques can be combined to help bridge the scale gap between what we are capable of perceiving and the data that we need to understand. During this discussion we will explore some of the specific scalability challenges that we face in the global digital marketing economy, and prior work with IBM Watson for Genomics.

Biography: Dr. Alan Keahey has played a leading role in the research and development of innovative data visualization systems for over 20 years. His experience spans a wide range of environments including National Labs Research Scientist, Research Director at a Lucent Bell Labs Venture Company, Founder and President of a visualization R&D company, Visualization Consultant to Fortune 500 companies and Senior Data Visualization Scientist at IBM Watson. He has published seminal papers in the field of information visualization, and has created a number of widely known data visualization techniques and systems.

Alan is currently the Vice President for Data Visualization and Business Intelligence at Conversant Media, a major player in the digital marketing business with headquarters in Chicago. His team is creating innovative visualization tools to help understand complex digital economies spanning hundreds of millions of customers each defined by thousands of profile dimensions, across hundreds of millions of content sites, generating billions of daily interactions and many petabytes of data. Alan is an Adjunct Professor at Northwestern University where he teaches a graduate level course on Data Visualization. He also founded a racing technology company that manufactures his patented brake heat shields for worldwide distribution. A regular speaker at both research and commercial conferences, he thrives on forging connections between the innovations created in research environments and the real-world needs of business customers.

For more information contact the technical host Curt Canada, 505-665-7453, cvc@lanl.gov.

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