UNCLASSIFIED

Information Science and Technology Seminar Speaker Series

Terece Turton
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Using Qualtrics & Amazon Mechanical Turk for User Testing and Validation of Colormaps for Scientific Visualization

Wednesday, July 15, 2015

3:00 - 4:00 PM

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

Abstract: The ECX Collaboration, based in the LANL Data Sciences at Scale group, is taking an innovative approach to developing and validating colormaps for scientific visualization. By combining the skills of a visual artist specializing in color with extensive user study evaluation and validation throughout the colormap development process, we have created colormaps with greater perceptual depth than commonly used standards. In the development process, this user study approach can be used to identify weaknesses within a colormap, driving colormap improvements. This talk will focus on the user study methodology and present user studies to date. Our approach focuses on data and tasks of interest to the domain scientist and the user studies employ Qualtrics survey software with a participant pool drawn from Amazon Mechanical Turk, an online crowdsourcing site.

Biography: Dr. Terece Turton received her Ph.D. in Physics from the University of Michigan. Now a researcher in the Center for Agile Technology at the University of Texas at Austin, her background includes both experience as a domain scientist (high energy physics) and as a data analyst in the business world. Her current research focus is the design, implementation and analysis of user studies for scientific visualization.

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

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