

Information Theory in Visualization

Min Chen, Mateu Sbert, Han-Wei Shen, Ivan Viola, Anton Bardera, and Miquel Feixas

Abstract

In this half-day tutorial, we review a variety of applications of information theory in visualization. The holistic nature of information-theoretic reasoning has enabled many such applications, ranging from light placement to view selection, from feature highlighting to transfer function design, from data fusion to visual multiplexing, and so on. Perhaps the most exciting application is the potential for information theory to underpin the discipline of visualization, for example, mathematically confirming the benefit of visualization in data intelligence.
