Abstract

With availability of enough visualization techniques it can be very confusing to know what and when should be appropriate technique to use in order to convey maximum possible understanding. The basic purpose of visual representation is to efficiently interpret what is insight, as easy as possible. Different available visualization techniques are use for different
situation which convey different level of understanding. This document is guide for the young
researchers who wants to start work in visualization. The purpose of this piece of document is to
collect all visualization techniques with their brief introduction. This paper deals with many
definitions and aspects of visualization, how visualization take place i.e. different steps of
visualization process, problems that are confront in visualization, categorization of visualization
techniques on the bases of distinct perspective, typically known common data and information
visualization techniques, basic interactive methods for visualization their advantages and
disadvantages, interactivity process, and the scope of visualization up to some extent in
different field of research.

Reference

- Chris North, “Information Visualization”, Center for Human-Computer Interaction,
  Department of Computer Science Virginia Polytechnic Institute and State University Blacksburg,
  VA 24061 USA
- Beatrix Sousa Santos, “Evaluating Visualization techniques and tools: what are the main
  issues?”.
  Applications”, vol. 11, no. 4, pp. 443-456
  Visualization: Using Vision to Think”. Morgan Kaufmann.
  Bergeron, eds., pp. 337-342.
- WebSter Dictionary: www.webster-dictionary.org/definition/visualization
  n.3, p.40-45.
  Personal and Ubiquitous Computing Journal, Vol. 8, No.2.
- A Periodic Table of Visualization Methods.
  http://www.visual-literacy.org/periodic_table/periodic_table.html
  Proc. 8th Int'l Symp. Graph Drawing,2000, pp. 183-196
- WebSter Dictionary: www.webster-dictionary.org/definition/aesthetic
- Adobe Flex, Advanced Data Visualization Developer Guide
www.neoformix.com/2006/MultiLevelPieChart.html
- What is Scatter plot? www.psychwiki.com/wiki/What_is_a_scatterplot%22
Data and Information Visualization Methods, and Interactive Mechanisms: A Survey

- Shneiderman, Ben; Plaisant, Catherine (2009). "Treemaps for space-constrained visualization of hierarchies".
- Usability First: www.usabilityfirst.com/glossary/cone-tree/
- Student Guide to Timeline: www.lkwdpl.org/study/timeline/
- Generating of Marketing insight, Semantic networks: www.duke.edu/~mccann/mwb/15semnet.htm

Index Terms

Computer Science
Information Sciences

Key words

Visualization Categorization
Visualization Challenges
Data Visualization

Information Visualization

Visualization Interactivity