A Visual Survey of Tree Visualization

Susanne Jürgensmann
Hans-Jörg Schulz

http://treevis.shows.it
ver. 09-AUG-2010

Trees + Handheld Devices

explicit / implicit

Rectangular View 2003 [41]

Radial Edgeless Tree 2007 [27, 28]

Trees + Tabletop Devices

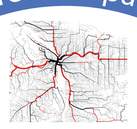
explicit / implicit

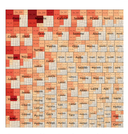
Hyperbolic Look-alike 2002 [89]

Force-directed Voronoi Treemap 2009 [33]

Trees + Space

explicit / implicit


Road Network MST 2008 [54]


Spatially Ordered Treemap 2008 [99]

Trees + Time

explicit / implicit

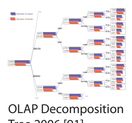
Ripple Presentation 2006 [36]

Contrast Spiral Treemap 2007 [85]

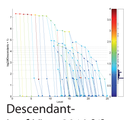
Trees + Visualization

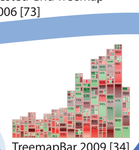
explicit / implicit

Vis in Trees / Trees in Vis


OLAP Decomposition Tree 2006 [91]

Nested Grid Treemap 2006 [73]

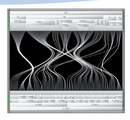

Descendant-Leaf-View 2010 [4]


TreemapBar 2009 [34]

Trees + Trees

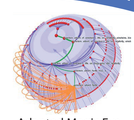
explicit / implicit

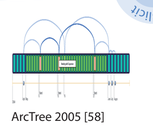
TreeJuxtaposer 2003 [56]


Connected Icicle Plots 2008 [30]

Trees + Crossedges

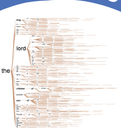
explicit / implicit

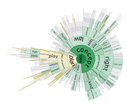

Adapted Magic Eye View 2001 [93]


ArcTree 2005 [58]

Trees + Text

explicit / implicit


Word Tree 2008 [97]


DocuBurst 2009 [19]

Large Tree Visualization 2009 [29]

Archimedean Spiral Layout 2009 [25]

Space-optimized Tree 2002 [59, 60]

Hyperbolic Browser 1996 [49]

Point-based Tree Visualization 2009 [75, 76]

RINGS 2002 [84]

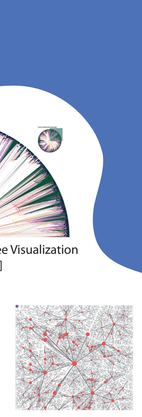
Disk Tree 1998 [15]

Kennedy Family Tree 2009 [18]

Bubble Tree 2004 [26]

Balloon Drawing 2005 [51]

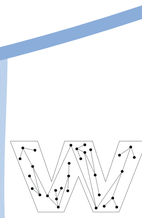
Circular Phylogenetic Tree Layout 2005 [5]



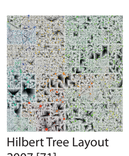
Radial Phylogenetic Tree Layout 2005 [5]

Force-directed Layout 2003 [82]

Simulated Annealing-based Layout 2005 [6]



Hilbert Tree Layout 2007 [71]



EncCon Tree 2D 2005 [61]

EncCon Tree 3D 2007 [35]

Cam Tree 1991 [70]

Cone Tree 1991 [70]

Magic Eye View 1999 [46]

Spherical Layout 2007 [50]

Thread Arcs 2003 [42]

SpaceTree 2002 [68]

Cityscape Metaphor 1997 [43]

Symmetric 3D Layout 2008 [31]

PhylloTrees 2006 [57]

H-Tree Layout 1976 [77] (figure from wikipedia.org)

Walker Layout 1990 [12, 94] (figure courtesy of Sebastian Leipert)

FlexTree 2002 [79, 80]

PolyPlane 2003 [32]

Reconfigurable Disc Tree 1998 [38]

H3 1997 [55]

Information Slices 1998 [1]

Modifiable Treemap 2000 [90]

Elastic Hierarchies 2005 [101]

Data Jewel-Box 2002 [37]

Tree-Map 1991 [39, 78]

Quantum Treemap 2001 [10]

Cushion Treemap 1999 [88]

Fractal Tree 2005 [63]

Eichhorn-Tree 2006 [24]

Cheops (TM) 1996 [9]

Trees 1981 [45]

Cushioned Icicle Plot 2007 [14]

Generalized Treemap - Pyramid 2006 [92]

Generalized Treemap - Combination of Pie and Pyramid 2006 [92]

FanLens 2008 [52]

CropCircles 2006 [67]

Generalized Treemap - Pie 2006 [92]

InterRing 2002 [100]

PieTree 2000 [21]

Castles 1981 [45]

Cascaded Treemap 2008 [53]

Ellimap 2007 [64, 65, 66]

Sunburst 2000 [81]

Pebble Map 2003 [98]

Fan Chart 2008 [23]

Lifted Treemap 2009 [13]

2 1/2-D Treemap 1992 [86]

Triangular Aggregated Treemap 1998 [16]

2D Beamtree 2002 [87]

2D Icicle Plot 1981 [47]

Treemap with Ovals 1993 [40]

Nested Columns 1993 [40]

Polar Treemap 1993 [40]

3D Nested Cylinders and Spheres 2006 [95]

Nested Hemispheres 2004 [7]

3D Beamtree 2002 [87]

3D Icicle Plot 1981 [47]

3D Treemap 1993 [40]

Spherical Caps 2009 [22]

3D Nested Treemap 1999 [17]

Information Pyramids (TM) 1997 [3]

StepTree 2004 [11]

3D Sunburst - Sphere 2010 [74]

3D Sunburst - Wheel 2010 [74]

3D Sunburst - Cylinder 2007 [72]

Botanical Tree 2001 [44]

Collapsible Cylindrical Tree 2001 [20]

Tree Cube 2003 [83]

Information Cube 1993 [69]

Circular Partitions 2008 [62]

Voronoi Treemap 2005 [8]

2D Contour Map 2006 [48]

3D Contour Map 2006 [48]

Jigsaw Map 2005 [96]

InfoSky 2002 [2]

Universität Rostock
gegründet 1419
Traditio et Innovatio

VisMaster
Visual Analytics - Mastering the Information Age