Exploring InfoVis Publication History with Tulip

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Tulip

• graph drawing testbed
  – scalable
  – powerful
  – flexible

• functionality
  – clustering
  – layout
  – interaction
  – guaranteed frame rate rendering
Finding GGR: interactively move
Reachable subgraph 1 hop: papers

- George G. Robertson
- The cognitive coprocessor architecture for interactive user interfaces
- Rapid controlled movement through a virtual 3D workspace
- Perspective Wall
- Case Trees
- Infosys using 3D interactive animation
- Developing calendar visualizers for the information visualizer
- Rich Interaction In the Digital Library
Reachable subgraph 2 hops: citers
Convolution Clustering

• visually determine best number of clusters
  – Strahler based graph clustering using convolution. David Auber, Maylis Delest, and Yves Chiricota. 8th Int'l IEEE Conference on Information Visualisation, London, 2004

• clusters quite stable, show off core topics

• Strahler metric measures "centrality"
Cluster 1: PARC/Furnas, F+C

- The cognitive coprocessor architecture for interactive user interfaces
- Rapid controlled movement through a virtual 3D workspace
- Jock Mackinlay
- Perspective Wall
- Generalized fisheye views
- SIGCHI 88
- SIGCHI 91
- UIS 89
- Stuart Card
- George W. Furnas
Cluster 3: Focus+Context
Cluster 4: ZUIs, high dim, brushing
Cluster 5: everything else

An empirical study of algorithms for point-feature label placement

Edge concentration: a method for clustering directed graphs

Time, clocks, and the ordering of events in a distributed system

Guest Editors' Introduction: Visualization

Voyeur graphical views of parallel programs

John Stasko

James Allan

Vis '93

SIGGRAPH '94

To see, or not to see—Is That the query?

SOCG '90

Dynamic queries

Hierarchical geometric models for visible surface algorithms

Dynamic scenes

Martin Juvan

Quintary trees: a file structure for multidimensional database systems

Joshua Levisseur

Dennis Lee

Screen management in hypertext systems with rubber sheet layouts

Numerical recipes in C

GD '95
Core Clutter with Auth-Conf
Small-World Clustering
Recursively Cluster