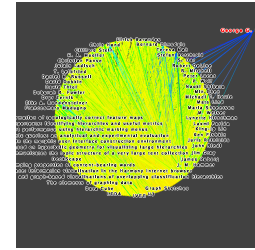
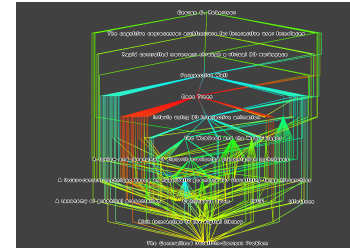


Exploring InfoVis Publication History with Tulip

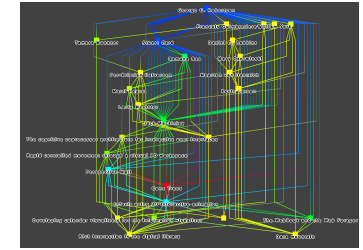
Maylis Delest, LaBRI Bordeaux
 Tamara Munzner, University of British Columbia
 David Auber, LaBRI Bordeaux
 Jean-Philippe Domenger, LaBRI Bordeaux



focusing on an author
 • Robertson



reachable subgraph
 • 1 hop away: papers



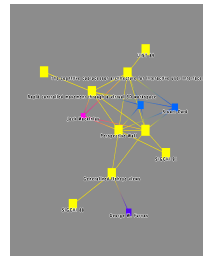
reachable subgraph
 • 2 hops away: citers

Tulip: free graph drawing software <http://www.tulip-software.org>

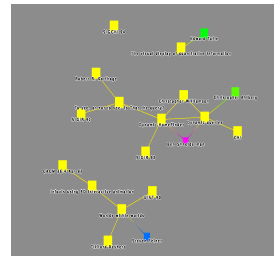
- scalable, powerful, flexible testbed
- clustering, layout, interactive exploration, guaranteed frame rate rendering

Convolution clustering

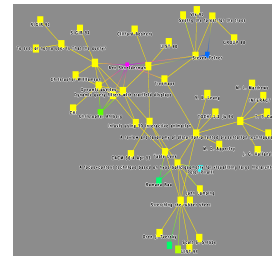
- reveals core topics
- Strahler metric measures "centrality"
- visually determine best number of clusters
- Strahler based graph clustering using convolution.
 Auber, Delest, and Chiricota. 8th Int'l IEEE Conf. on Information Visualisation, London, 2004



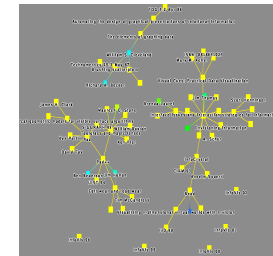
central cluster
 • PARC
 • Focus+Context



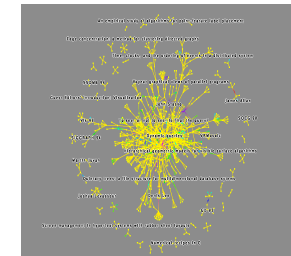
cluster 2
 • Dynamic Queries
 • Tufte



cluster 3
 • Focus+Context



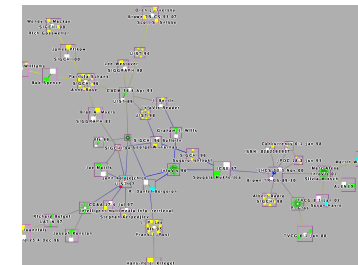
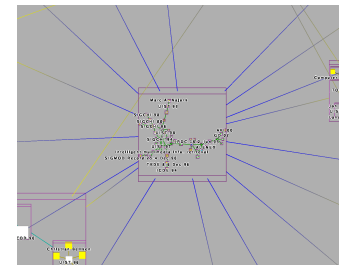
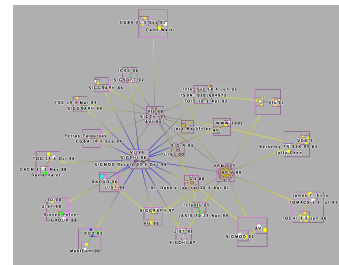
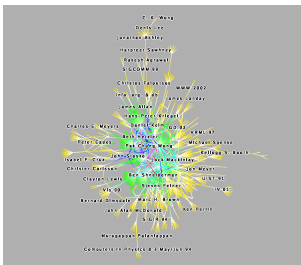
cluster 4
 • ZUIs, brushing
 • high dimensionality



least central cluster
 • all the rest

Small-world clustering

- hierarchical subdivision
- shows structure, reduces clutter
- Multiscale Visualization of Small World Networks.
 Auber, Chiricota, Jourdan, and Melançon. InfoVis'03



Evolution over time, 95-02. Colored by number of InfoVis pubs. By 2002, only 20 completely separated papers.