

Academic Network Explorer

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For CPSC 547 Information Visualization

Scholarly Data

Millions of papers, authors
Citations
Co-authorships

Tasks I (Typical User)

- Who wrote this paper? When and where was it published?...
- Who are influential in this topic? And trending?
- Who works with this guy usually?
- What is he working on recently?
- ...

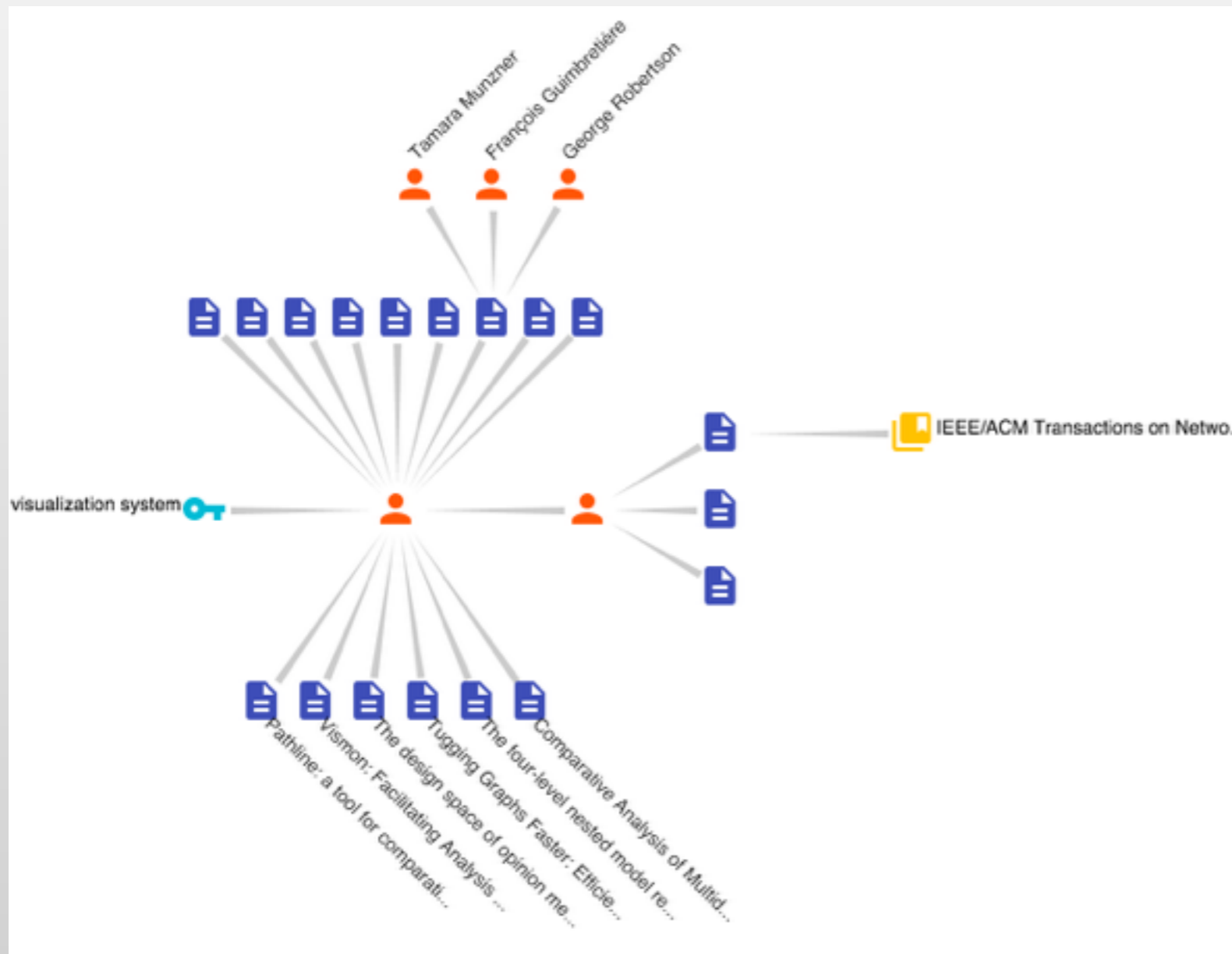
Information (attributes, ambient
objects) around a central
object

Task II (Visualization)

- Locate an object (target known)
- Explore ambient objects of it
 - Present distributions of attributes



“Rectangular” Graph Layout



Also, “smart” labeling!

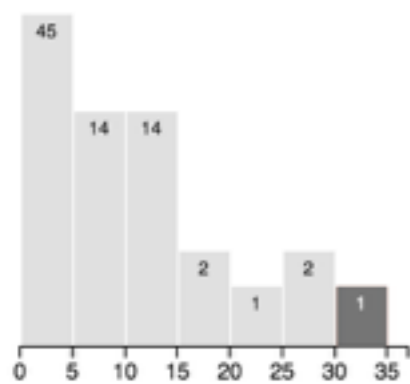
Ambient Objects

Explore ambient objects of current selection

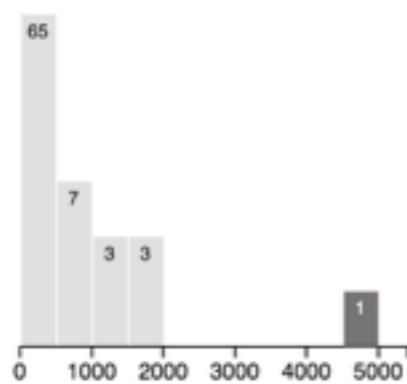


EXPLORE

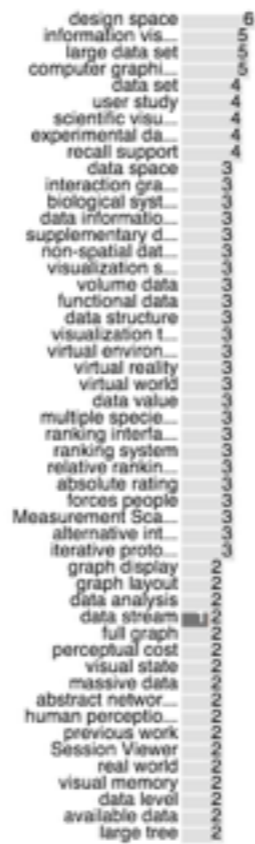
H-index



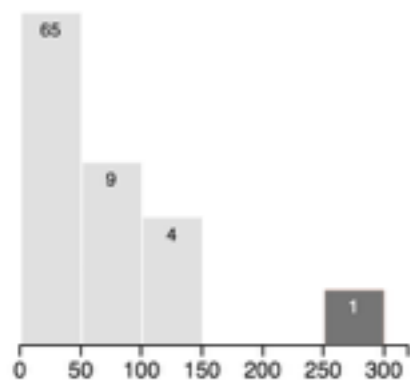
citations



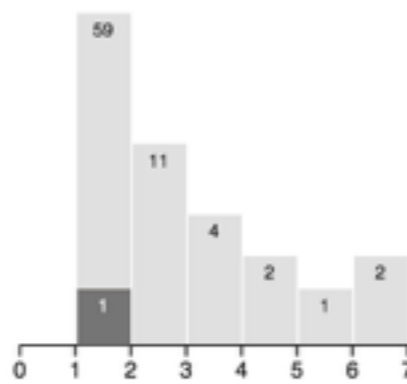
Terms



publications



papers co-authored



More...

ADD SELECTED

ADD ALL

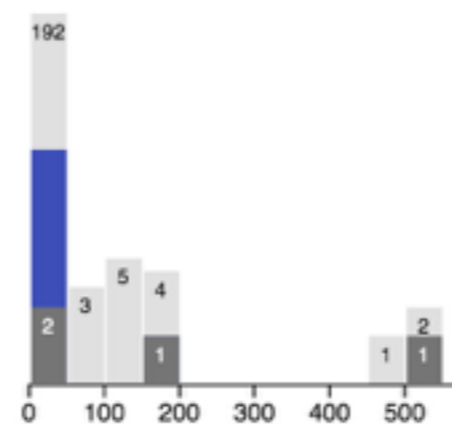
Explore ambient objects of current selection



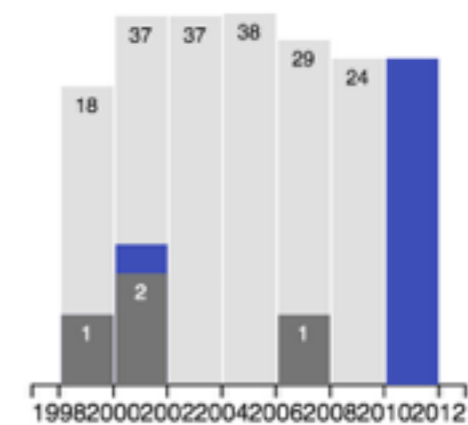
reference citation

EXPLORE

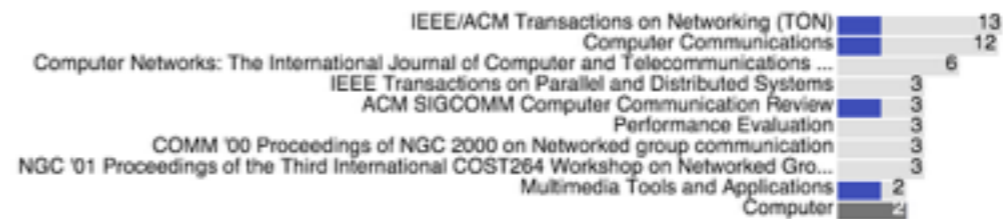
citations



Year



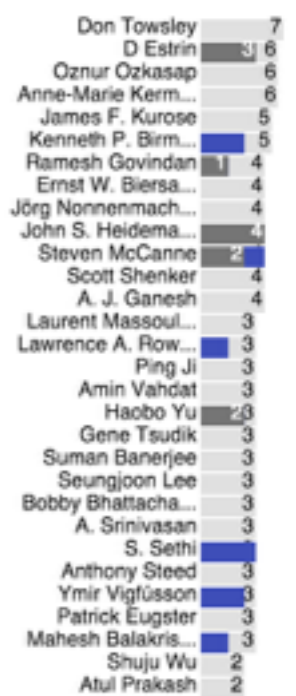
Venues



More...

More...

Authors







ADD SELECTED

ADD ALL

Material Design & Consistent Colors

Pick an author ×

Enter an author's name
Tamara Munzner

Tamara Munzner. Computer Science Dept., Stanford University, Stanford, CA and The Geometry Center, University of Minnesota, 1300 S. 2nd St, Suite 500, Minneapolis, MN

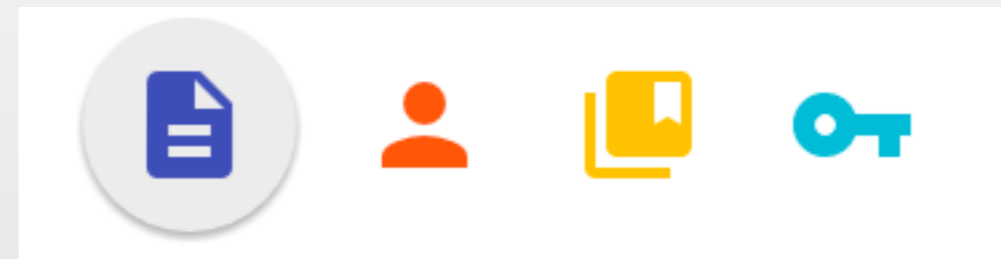
Tamara Arnicar. Washington University School of Medicine

Tamara I. Ahrens. Standford University, CIS028, Standford, CA

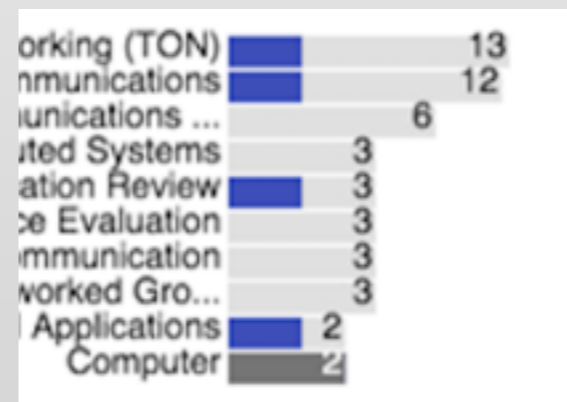
Tamara Jimenez. Department of Computer Science & Engineering, University of North Texas, Denton, USA

Tamara Rezk. INRIA SophiaAntipolis, France

ADD

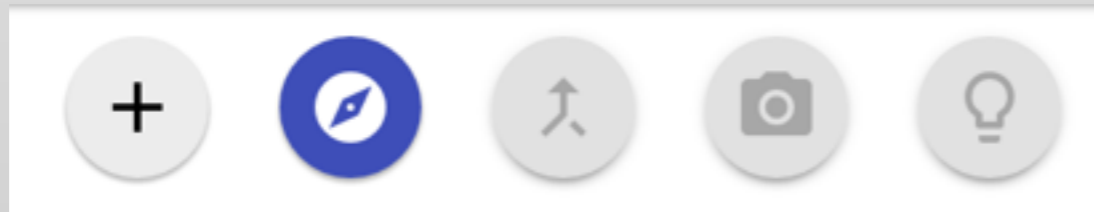


Pick a paper ×



Limitations

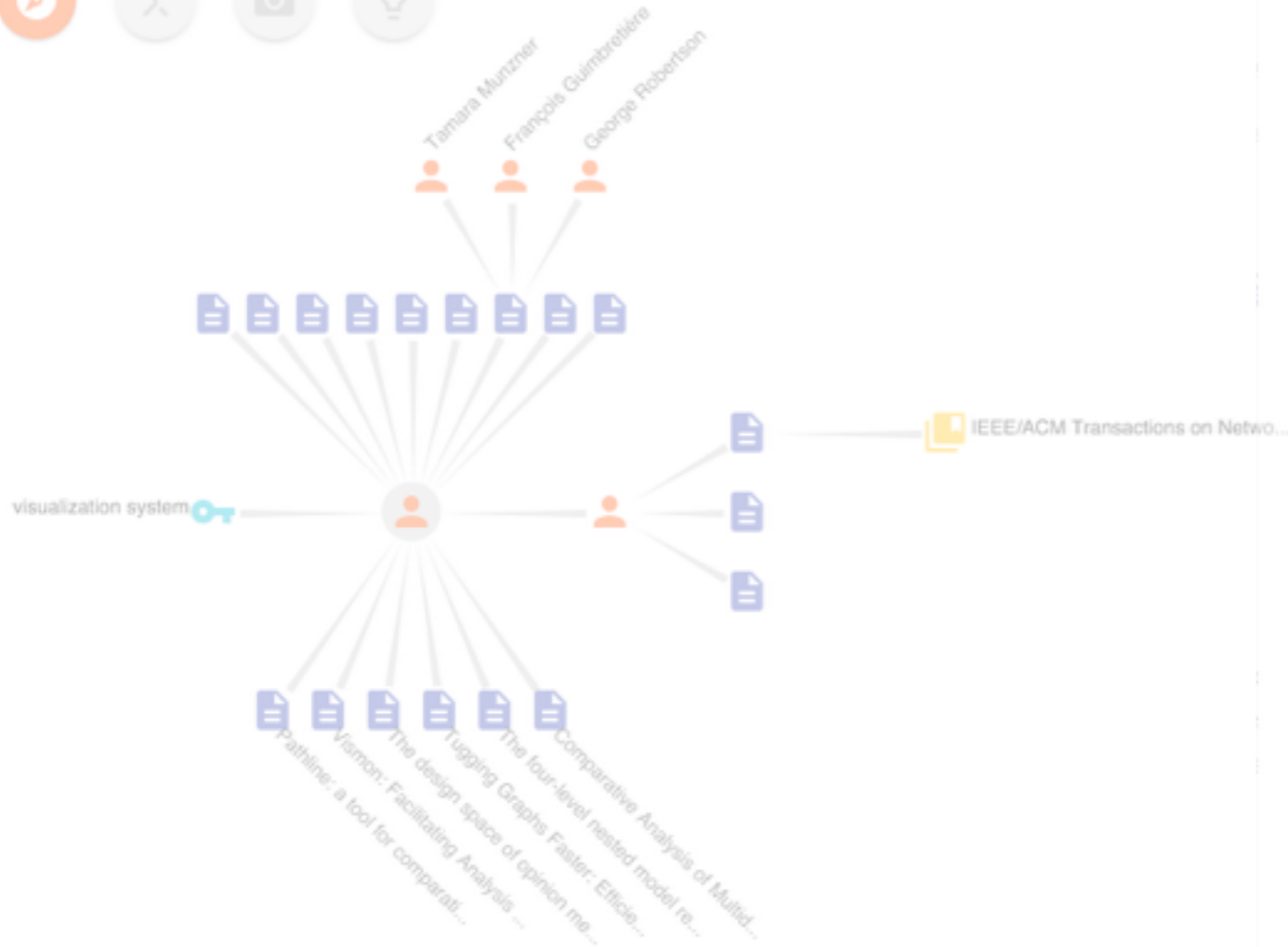
- No grand big pictures
- Exploration model: seed known, ...
- Scalability: histogram, layout
- Stay up for another night?



Conclusion

- Local network exploration from center to surroundings
- Learned a lot about thinking in the declarative (React*) way

* <https://facebook.github.io/react/index.html>



EXPLORE

H-index

Bin Range	0-5	5-10	10-15	15-20	20-25	25-30	30-35
Count	45	14	14	2	1	2	1

citations

Bin Range	0-1000	1000-2000	2000-3000	3000-4000	4000-5000
Count	65	7	3	3	1

publications

Bin Range	0-50	50-100	100-150	150-200	200-250	250-300
Count	65	9	4	0	0	1

papers co-authored

Bin Range	1-2	2-3	3-4	4-5	5-6	6-7	
Count	1	59	11	4	2	1	2

Terms

- design space 6
- information vis... 5
- large data set 4
- computer graphi... 4
- data set 4
- user study 4
- scientific visu... 4
- experimental da... 4
- recall support 4
- data space 4
- interaction gra... 3
- biological syst... 3
- data informatio... 3
- supplementary d... 3
- non-spatial dat... 3
- visualization s... 3
- volume data 3
- functional data 3
- data structure 3
- visualization t... 3
- virtual environ... 3
- virtual reality 3
- data value 3
- multiple specie... 3
- ranking interfa... 3
- ranking system 3
- relative rankin... 3
- absolute rating 3
- forces people 3
- Measurement Sca... 3
- alternative int... 3
- iterative proto... 3
- graph display 3
- graph layout 3
- data analysis 3
- data stream 3
- full graph 3
- perceptual cost 3
- visual state 3
- massive data 3
- abstract networ... 3
- human perceptio... 3
- previous work 3
- Session Viewer 3
- real world 3
- visual memory 3
- data level 3
- available data 3
- large tree 3

ADD SELECTED ADD ALL

Thank you