linkurious

visualize graph data easily.

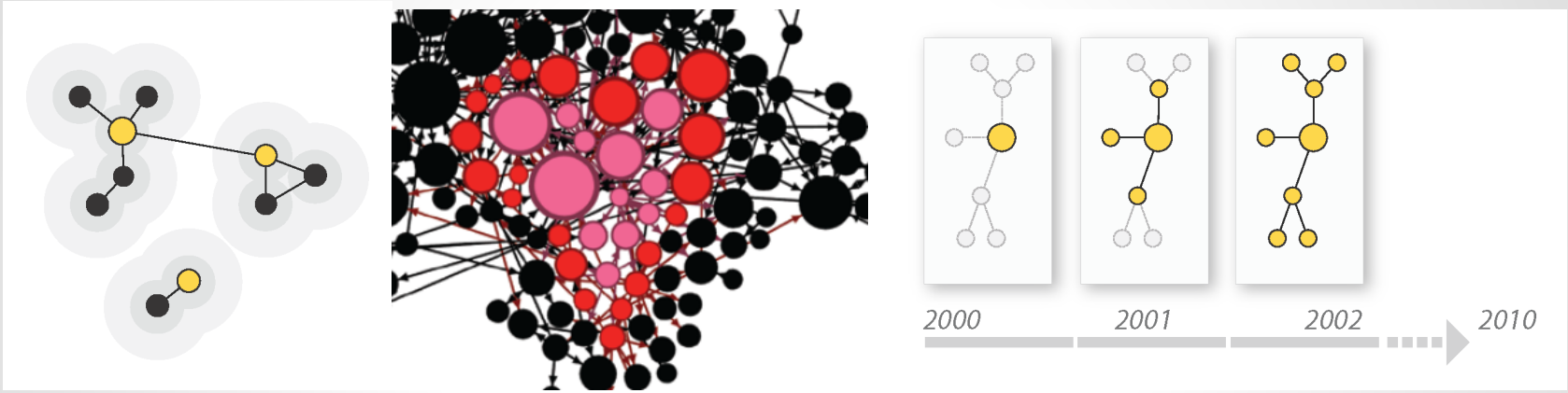
Navigating large graphs like a breeze with Linkurious

by Sébastien Heymann

http://linkurio.us | @linkurious

A few words about me

I do network/graph analysis and visualization.

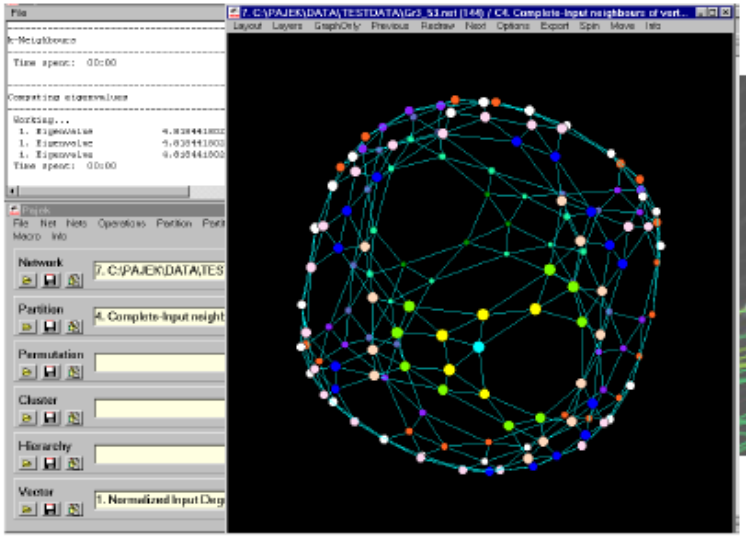


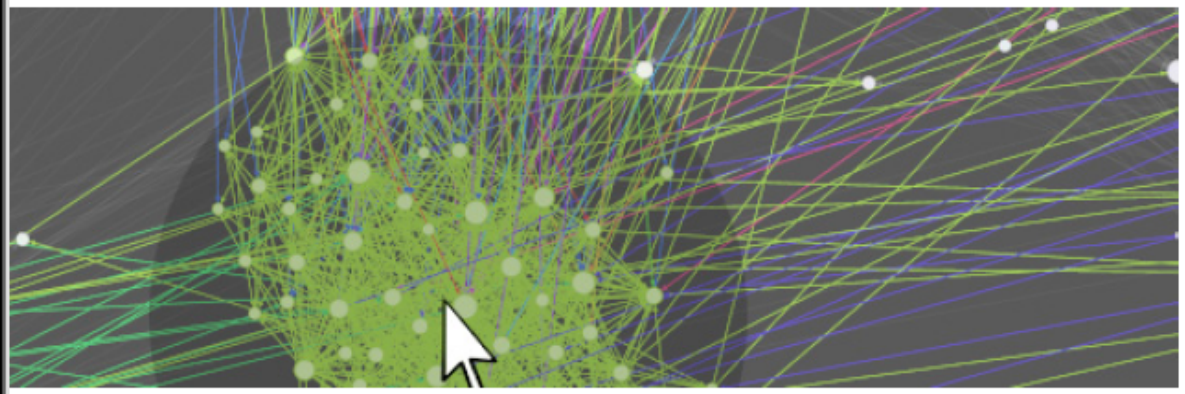
PhD candidate in computer science, UPMC LIP6

Co-founder of Gephi open source project - 2008

Co-founder of Linkurious SAS - 2013

Graph Visualization





1 see the network

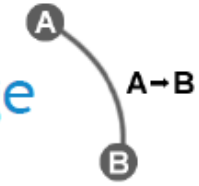
1st graph viz tool: Pajek (1996)
Vladimir Batagelj, Andrej Mrvar

2 interact in real time

Gephi prototype (2008)
group, filter, compute metrics...

3 build a visual language

size by rank, color by partition,
label, curved edges, thickness...



Why visualization?

"The greatest value of a picture is when it forces us to notice what we never expected to see"

John Tukey (1962)

Why visualization?

Exploration

generate research hypotheses

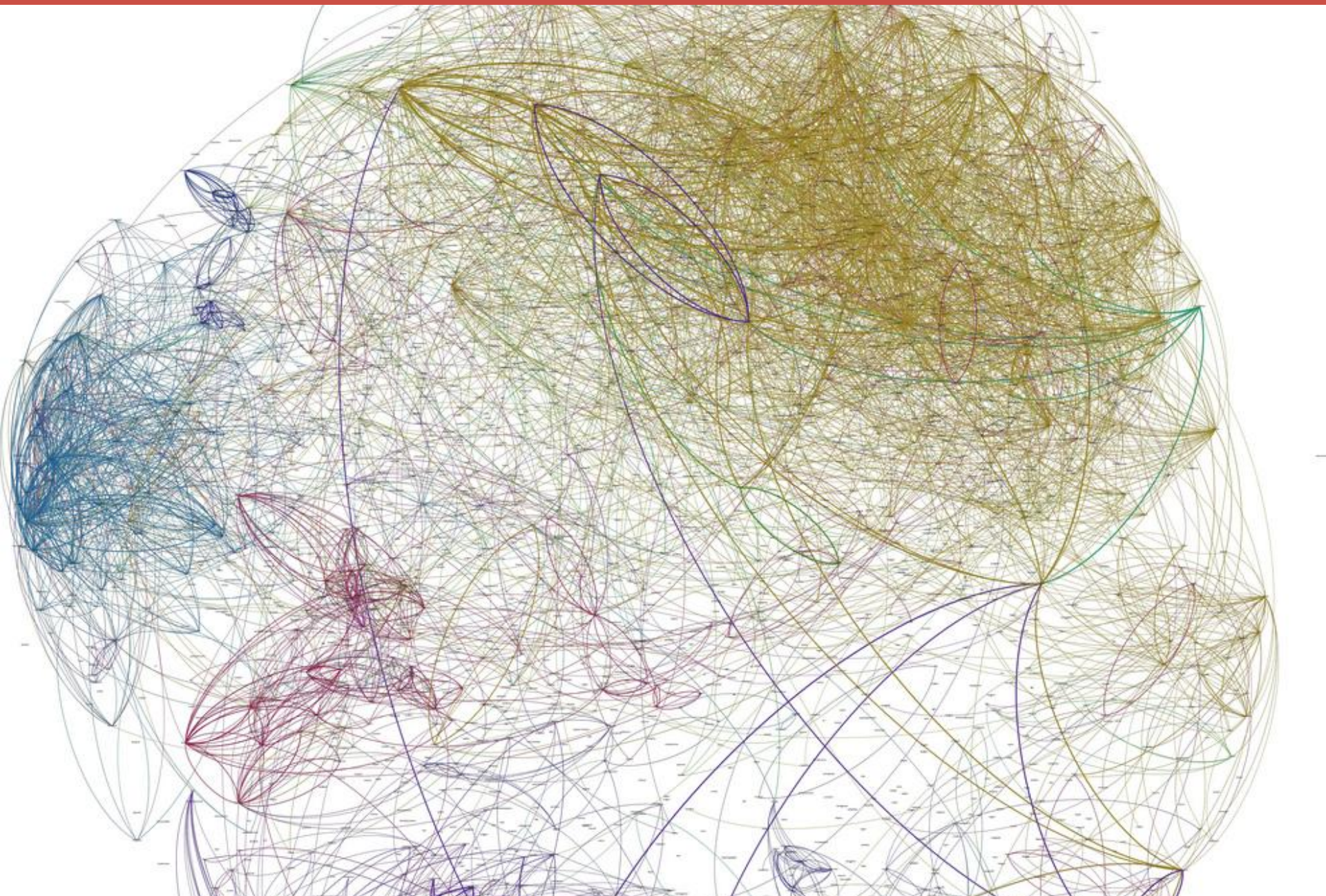
Confirmation

find evidences against hypotheses or results

Serendipitous findings

get surprised by looking at data

The “beautiful-but-unreadable” issue



Global vs local approach

Card, Shneiderman

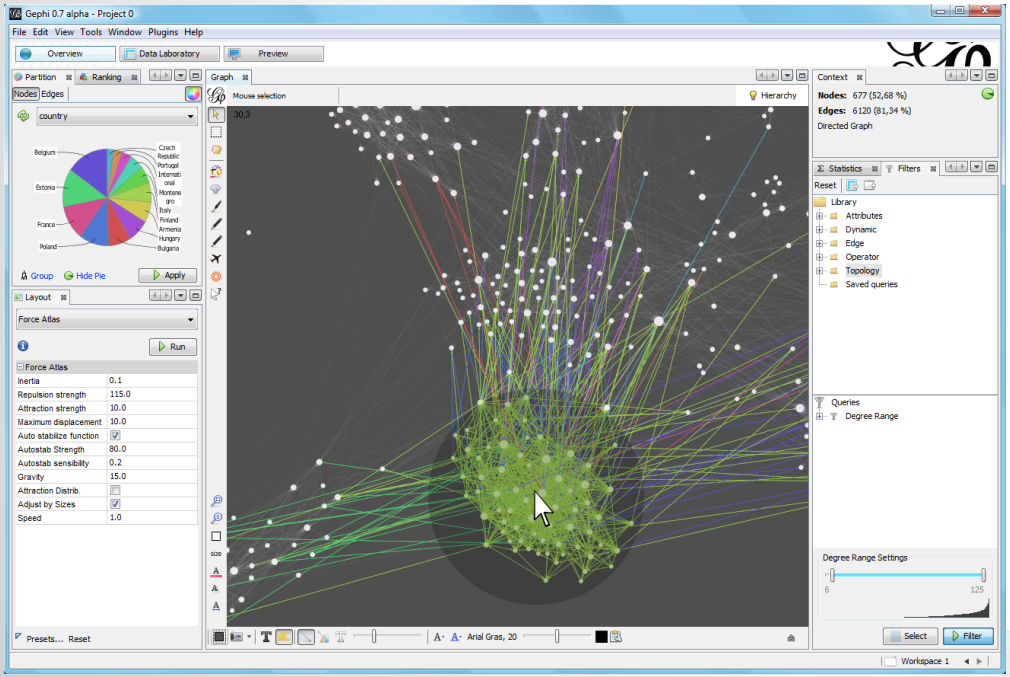
Using Vision to Think, 1999

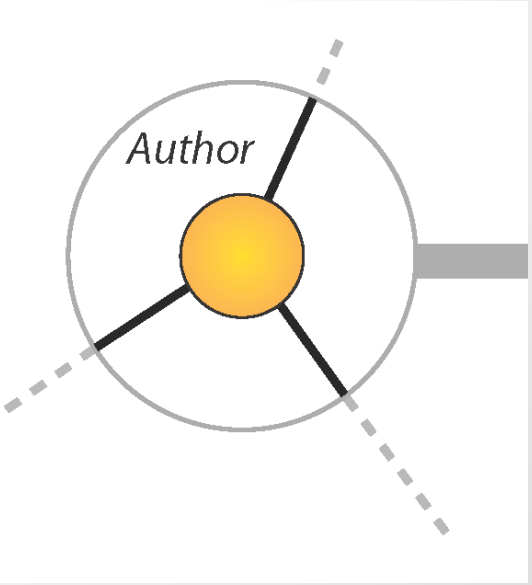
1. Overview first,
2. Zoom and filter,
3. Details-on-demand.

Van Ham, Perer

Search, Show Context, Expand on Demand, 2009

1. Search,
2. Show Context,
3. Expand on Demand.





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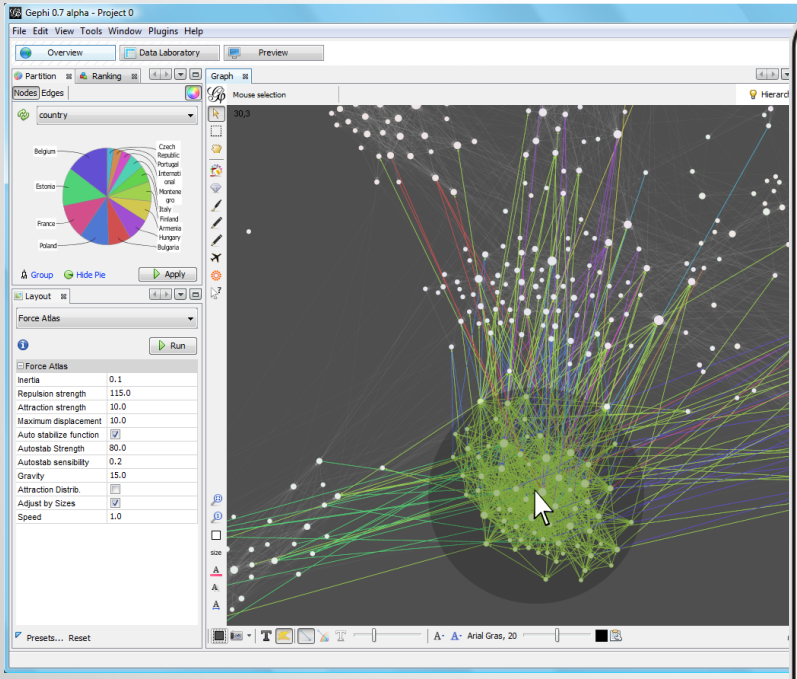
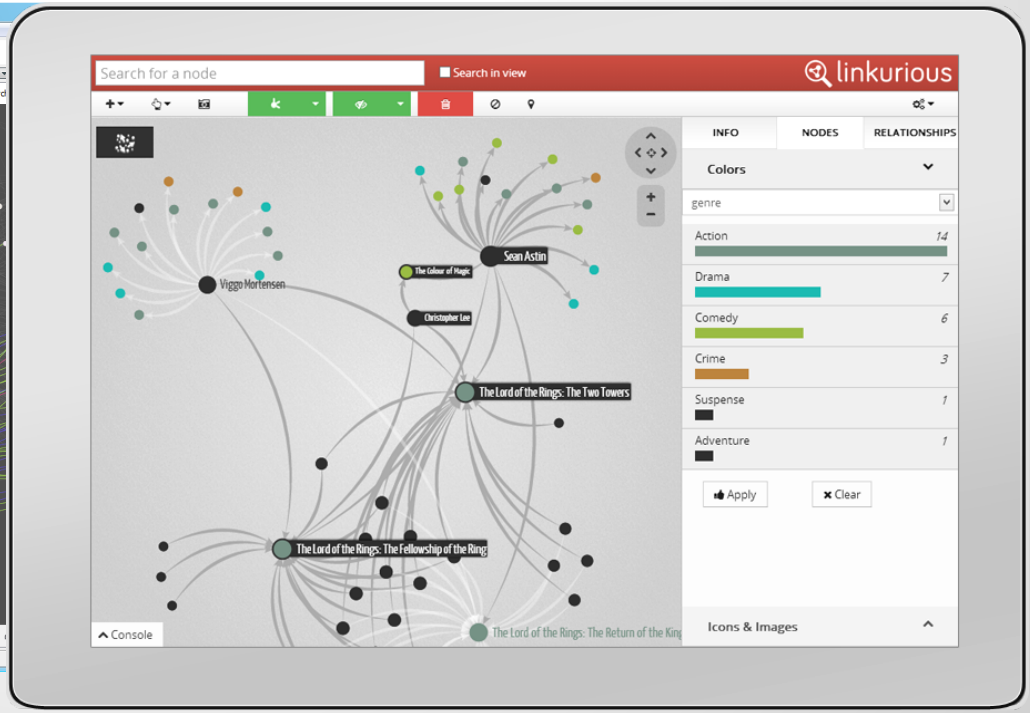




Linkurious SAS

Started by a collaboration with Stanford - Mapping the Republic of Letters and DensityDesign in 2012.

Linkurious solves this problem:

How to easily store, search and visualize your graphs using Neo4j graph database and a web browser?

We help:

data analysts, R&D teams, developers and business people

The Linkurious team

Jean

CMO

Consulting industry

Master:

Political Science /
Competitive Intelligence

Sébastien

CEO

Gephi co-founder

PhD:

Computer Science /
Complex Networks

Romain

CTO

Master:

Computer Science /
Machine Learning

Live demo - bibliographic dataset

30k nodes, 460k relationships

Everything published in Elsevier Scopus & ISI WoS for the search term "**project management**" in 2012

Multipartite, multiplex graph of publications, authors and stemmed abstract words (using Sci2 tool)

Work in progress with Julien Pollack & Daniel Adler, University of Technology Sydney, project Mapping the Field of Project Management.

Who writes with whom, and about what: a scientometric analysis of project management research, IRNOP 2013, Oslo

Conclusion

Linkurious SAS: French company, 3 guys, +60 customers (startups, big companies, researchers, developers)

Product development driven by user feedback

Main value proposition

navigate in graph data easily

How we can help you:

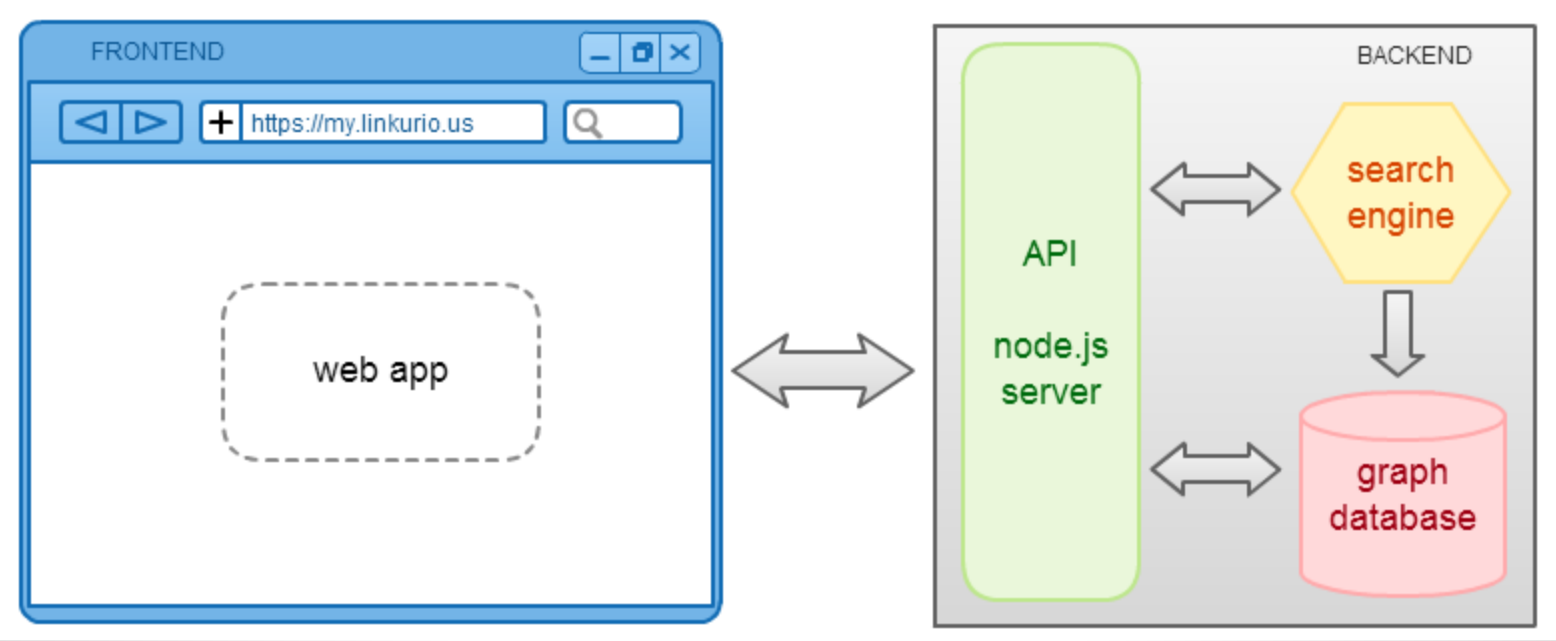
- research & development partnership
- setting up graph data portals on the Web

Merci ! (thanks)

More info and live demo at
http://linkurio.us

contact@linkurio.us

Linkurious technology



- Full HTML5
- All modern browsers
- 500 nodes at a time

- Scale to millions of nodes, relationships and properties
- Seamless connection to Neo4j
- Installed in a click
- Windows, Mac OS, Linux