Developing a visual interactive search history exploration system

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You will end up with a pile of relevant (and irrelevant) papers …

… and the need to store them, so you can use them later.
One good way to solve this is:

storing papers in watch lists or reference management program
But!

- Did you ever forget to store a paper?
- Do you remember with which query you found a paper?
- Can you identify at what point of your search process you found a document?
Another way to solve these questions:

conduct your search or browser history
And again…

... lists!
Do any of these lists really reflect your search process?
To me a search process is more like…

... hierarchical structure (tree)
... a graph (network)
... a map
... this:
... or like this:
... or even something like this?
What we want to develop is a Visual Interactive Search History Exploration System (VISHES)

A system that...
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A system that...

… automatically logs users activities in a DL.

… visualizes the search history.

… allows users to interact with their history.

… allows users to maintain their history.

… allows users to jointly work with their history.
Automatic Logging (examples)

- Query terms, documents, actions
- Temporal progress of the search
- Time spend with an object
Visualizing the Search History (examples)

• Object detail depth depending on zoom level
• Icon size depending on time spend with object
• Connect identical docs in different searches
Interaction with the Search History (examples)

- Switch to any point of history immediately
- Query/Filter search history
- Brushing & Linking (show docs with same author)
Maintaining the Search History (examples)

- Save and load the history
- Annotate and tag history objects
- Delete, insert objects
Jointly work with Search History (examples)

- Split and cluster history in multiple histories
- Share these histories with someone
- Use history together
When a search history is capable of all of these possibilities, it is not only a search history anymore!
It can become your individual and shared library!