

Professors Emeriti Network
Zoom Meeting - Wednesday, November 17, 2021, 17:00-19:00 CET
on
Potential and factual contribution of emeriti to the strategic development of their
universities

Abstract of the presentation made by

Maristella Agosti
Professor Emerita, University of Padua, Italy
maristella.agosti@unipd.it

on

The reconstruction of the history of information retrieval in Italy to provide inspiration
and ideas for the research of tomorrow¹

The scope of information retrieval (IR) and information retrieval systems is to support individuals in solving their information needs. Nowadays when we have an information need to solve, what we immediately think is to translate our information need into a query to ask a “Web search engine” or, for short, a “search engine”. A search engine is an information retrieval system that collects and manages a collection of Web documents from which it extracts the ones that best respond to users’ searches for information.

A widely used search engine is Google Search², however there are many other non-specialized search engines like Google Search, some of them are: Microsoft Bing³, Baidu search engine⁴ and Yandex search⁵. And there are so many other information retrieval systems that we use very frequently in everyday activities, in fact, whenever there is a magnifying glass symbol in the interface of a software application, that application provides us with a search engine to find information of interest to us; some of those information retrieval applications are: email systems, e-commerce applications, and social media platforms like LinkedIn, YouTube, Facebook, Instagram.

Normally the information retrieval process supports individuals in solving their information needs extracting from a collection of documents those that are considered of interest to the user that has expressed his information need through a query. In the “classical” information retrieval process an expert librarian, or an expert archivist, was helping the user in formulating the query representing his information need and was supporting the user in selecting from the document collection stored in the library or in the archive

¹ The slides of the presentation can be downloaded from the Web address: <http://eregion.eu/attached-documents/13329>

² https://en.wikipedia.org/wiki/Google_Search

³ https://en.wikipedia.org/wiki/Microsoft_Bing

⁴ <https://en.wikipedia.org/wiki/Baidu>

⁵ https://en.wikipedia.org/wiki/Yandex_Search

collection the documents probably of interest. In “modern” or automatic IR a software system is supporting the users answering to their queries.

Many are the aspects that need to be taken into consideration to design and build an IR system, schematizing the aspects or dimensions that need to be considered are:

- Document collection,
- Indexing,
- IR model,
- Interface,
- Evaluation.

And each of these dimensions requires researchers with different skills in different fields of computer science and also other disciplines to collaborate together in solving the problems to be faced.

A role that a person who has years of experience of scientific research can contribute to the reconstruction of the history of IR with the aim of retracing the history of the successes that have been achieved by research and development of the systems, but it is usually possible to learn about the successes also through the publications that have illustrated them. On the other hand, a contribution that is more difficult to have, and which would then be much more precious and useful, is the one that derives from the analysis of failures, which often have not been documented and that only those who have personally participated in research projects and in the conception of systems can provide.

Therefore an important role that could play those who have many years of experience in the field would be to help find analogies between the mistakes and the failures of the past and those that could be committed today to give indications to avoid them and suggesting more promising and safer ways of investigation.