

Information Retrieval

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What we find changes who we become.

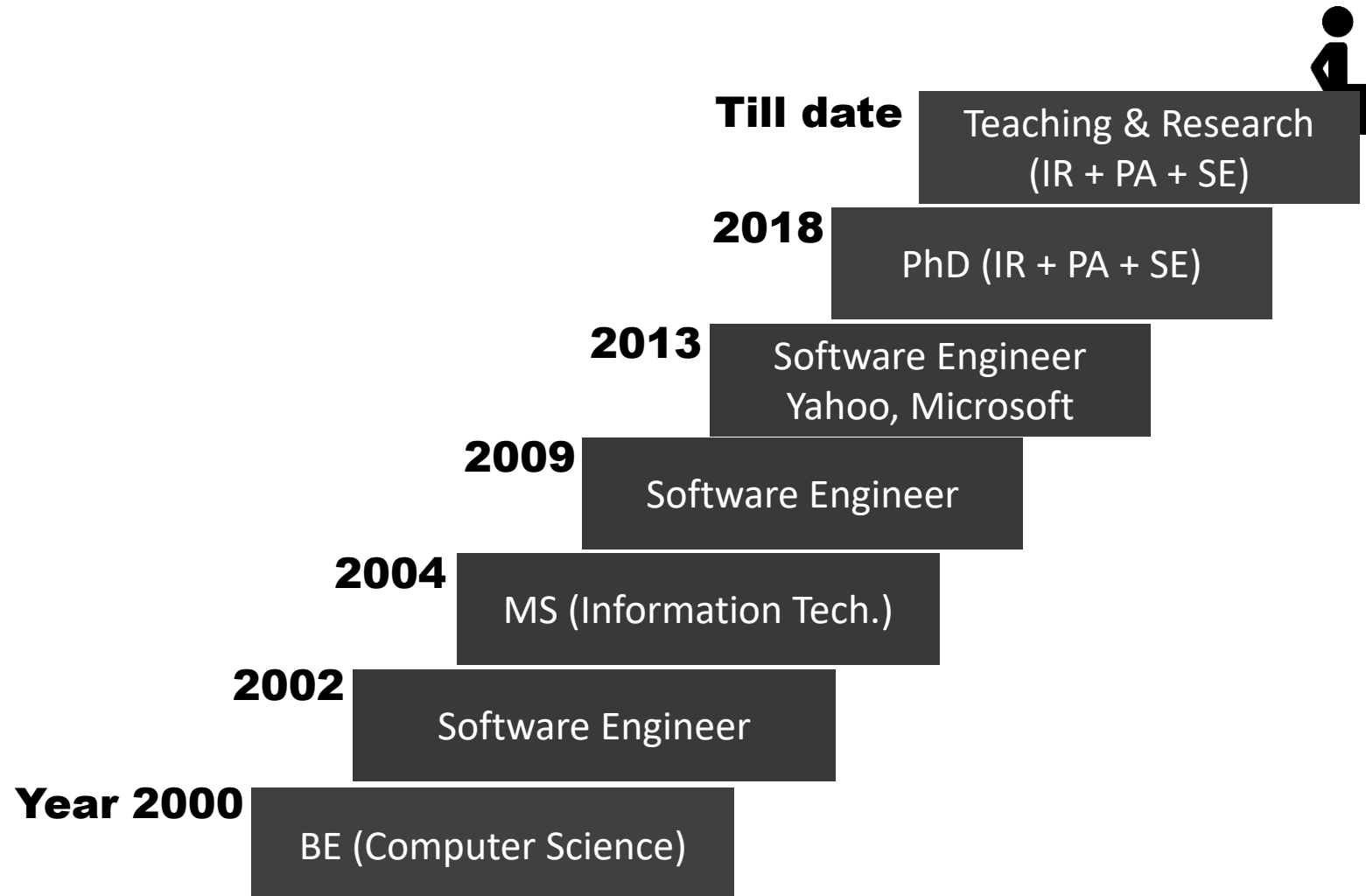
-Peter Morville.



Agenda

**A gentle introduce to
“Information Retrieval”**

About Me

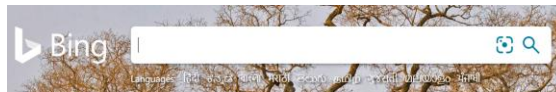


Acknowledgment

Some slides are borrowed from the companion website of Manning et al.'s IR book
(<https://nlp.stanford.edu/IR-book/>)

**A good teacher can inspire hope, ignite the
imagination, and instill a love of learning.**

-Brad Henry.

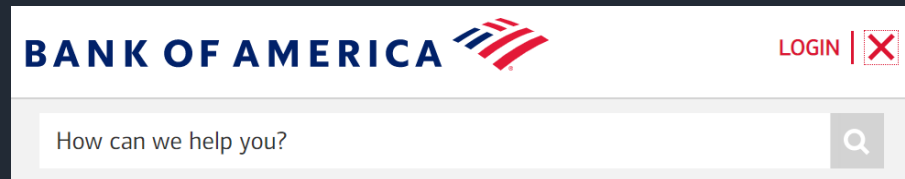


**Life without search engines is difficult
to imagine!**

Search in Banking and Finance

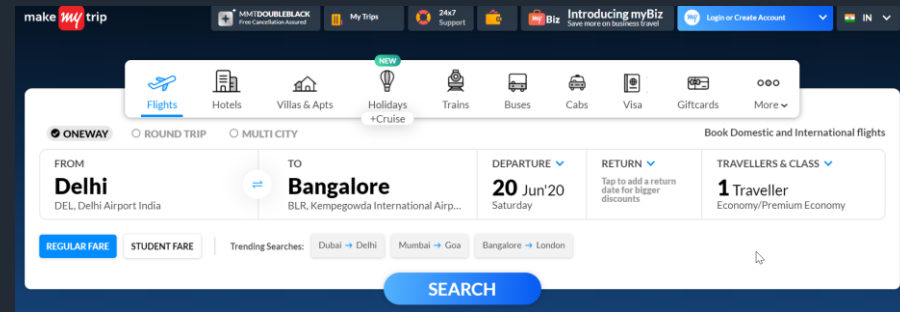
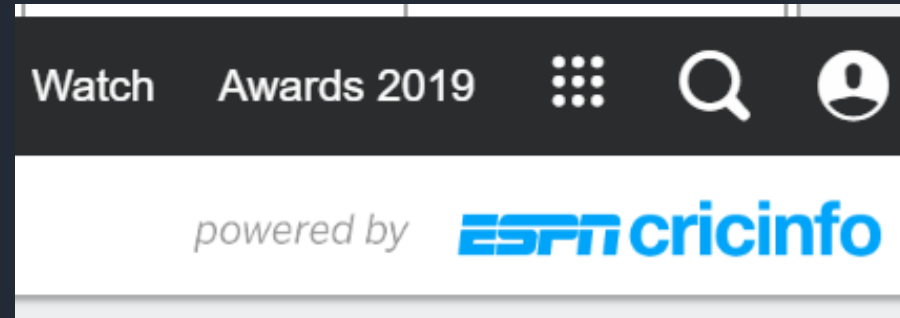
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sell

Reach a part of
documentation
faster



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Search events,
programs, and
schedules



Search in Education, Ecommerce and Healthcare

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symptoms,
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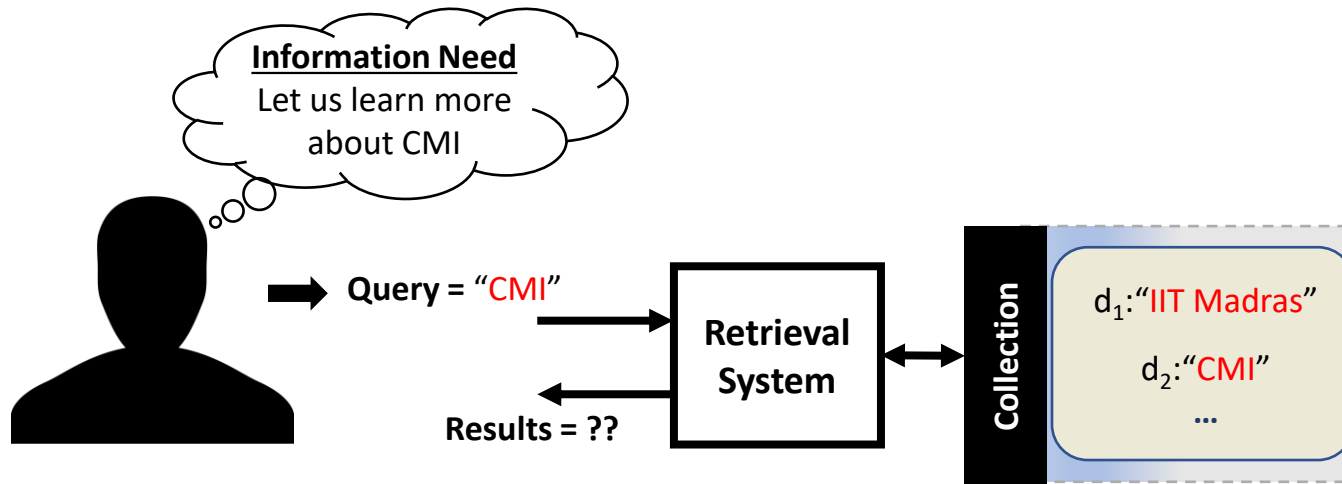


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What is Information Retrieval?



Information Retrieval (IR) is finding material (usually documents) of an **unstructured** nature (usually text) that satisfies an **information need** from within large collections.

– From the Manning et al. IR Book.

Information

Shannon's Definition, Fisher Information, Neumann Entropy, ...



Information is any entity or form that provides the answer to a question of some kind or resolves uncertainty. – Wikipedia.

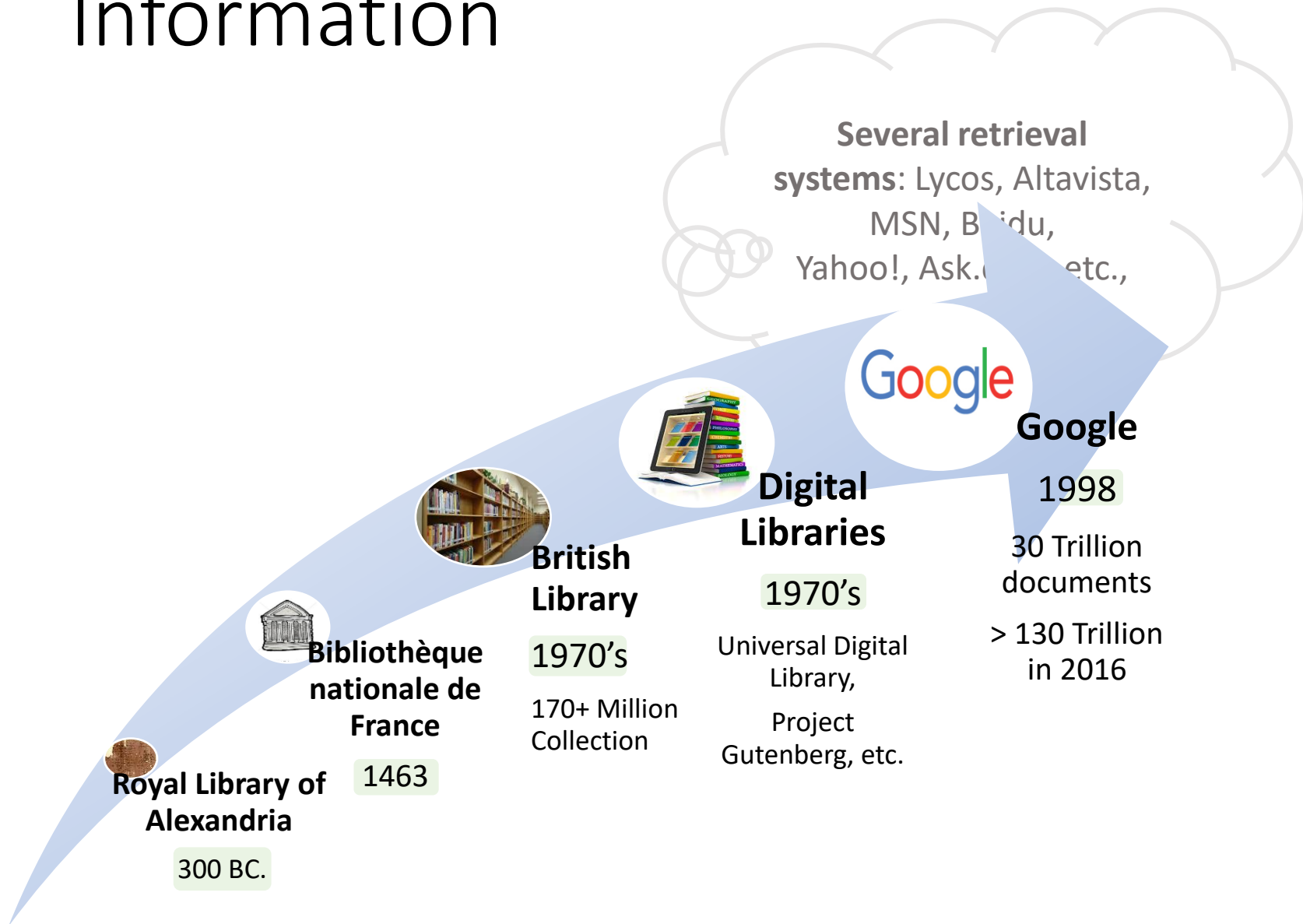
Role of Information

- If only you knew
 - Which stock to invest in?
 - Which faculty to work with?
 - How to get into a top college?
 - Which course to register for?
 - What to study?
 - How to prepare for job interviews?
 - ...
- If only you had the information, you could rule this world!
- What happens when all the information is deprived from you?

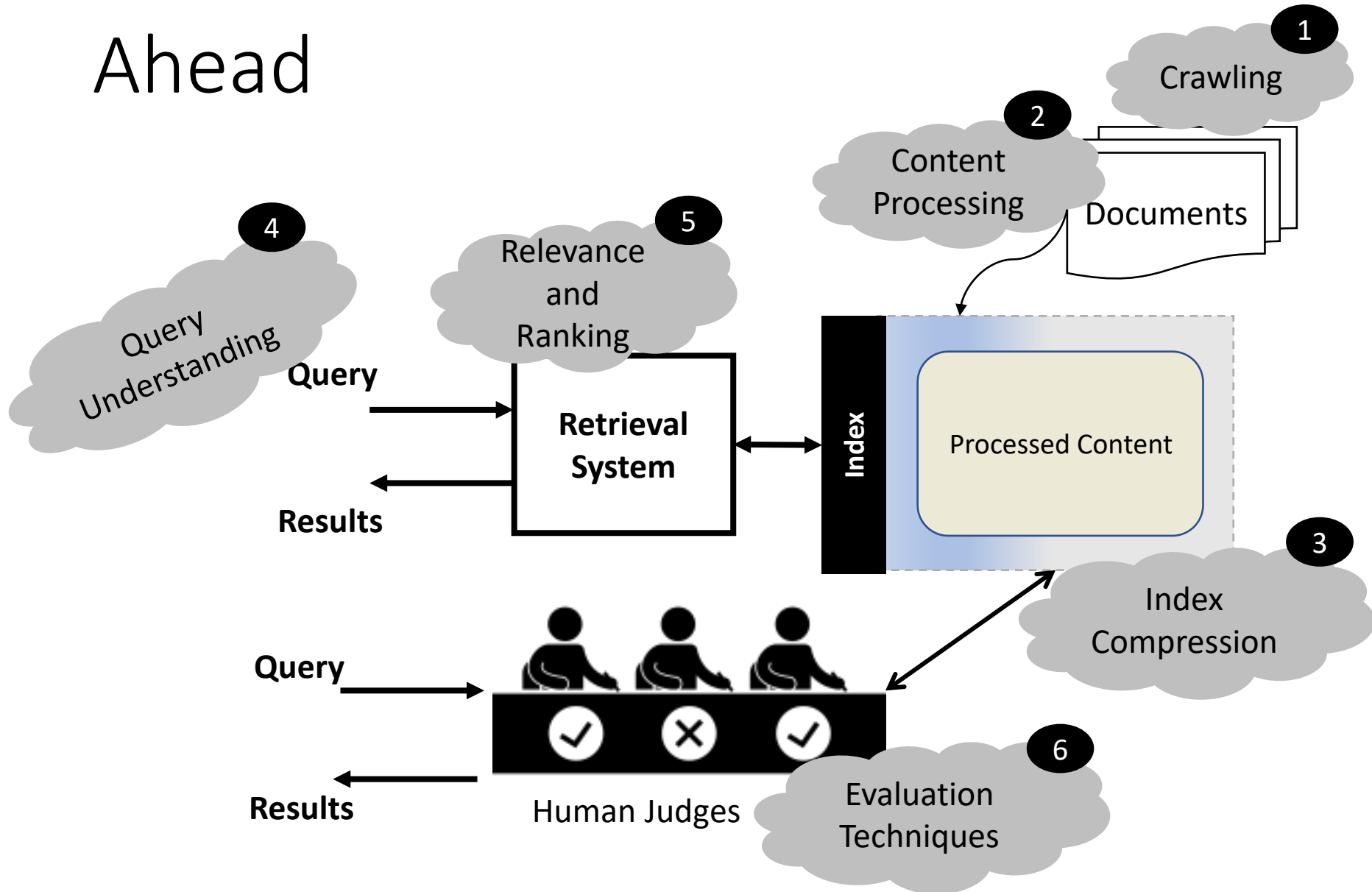
Solitary Confinement is Cruel



Information



Information Retrieval – Road Ahead



Technologies & Frameworks



Apache



Apache



Apache



Univ. of Glasgow



Galago, Indri

UMass & CMU

There are many more....

**Thanks to these... We can now focus on
more complex problems.**

Entity Search



amitabh bachchan



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Amitabh Bachchan
(अमिताभ बच्चन)

Indian film actor



srbachchan.tumblr.com

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Amitabh Bachchan is an Indian film actor, film producer, television host, occasional playback singer and former politician. He first gained popularity in the early 1970s for films such as Zanjeer, Deewaar and Sholay, and was dubbed India's "angry young man" for his on-screen roles in Bollywood. [Wikipedia](#)

Born: 11 October 1942 (age 77 years), Prayagraj

Height: 1.83 m

Spouse: [Jaya Bachchan](#) (m. 1973)

Upcoming movies: [Hera Pheri 3](#), [Brahmāstra](#), [Chehre](#)

Movies

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Sholay
1975



**Kabhi
Khushi
Kabhie...**
2001



Mard
1985



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Sitabo**
2020



Coolie
1983



amitabh bachchan



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Amitabh Bachchan

Indian Film Actor

Amitabh Bachchan is an Indian film actor, film producer, television host, occasional playback singer and former politician. He first gained popularity in the early 1970s for films such as Zanjeer, Deewaar and Sholay, and was dubbed India's "angry young man" for his on-screen roles in Bollywood. Referred to as the Shahenshah of Bollywood, Sadi ka Mahanayak, Sta... [+](#)



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Born: 11 Oct 1942 (age 77) · Allahabad, India

Height: 6' 0"

Spouse: [Jaya Bachchan](#) (m. 1973)

Children: [Abhishek Bachchan](#) (Son) · [Shweta Bachchan-Nanda](#) (Daughter)

Upcoming films: [Chehre](#) · [Wisdom for Heroes](#) · [Brahmastra](#)

Parents: [Harivansh Rai Bachchan](#) (Father) · [Teji Bachchan](#) (Mother)

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Research contributions from
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**In spite of all these developments,
“search”ing effectively has been an art.**

(This is why) The **academia**, **research labs**, and the **software industry** needs you.
Let us strive to build better search experiences.



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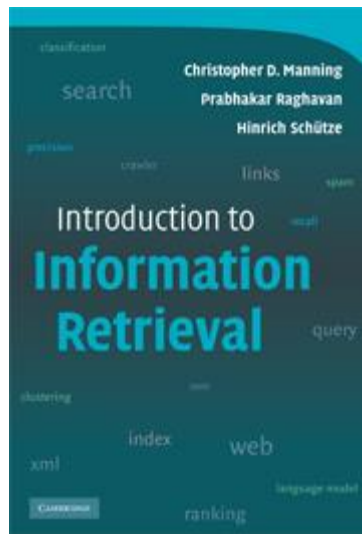


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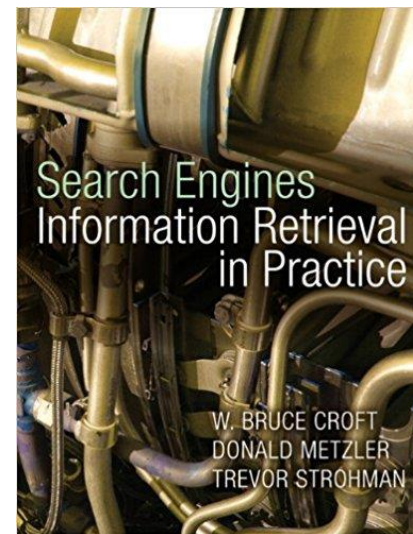


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Reference

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