# Searching For SCHOLARLY INFORMATION: Where & How LIBRARY SESSION FOR ENCS 282

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# **AGENDA**

- I. Where to search?
- 2. How to evaluate?
- 3. What are scholarly sources?
- 4. What are the major library search tools?

# WHAT SEARCH TOOL DO YOU USE TO FIND ACADEMIC INFORMATION?



# WHAT IS THE DIFFERENCE?

### GOOGLE SCHOLAR



Volume | Quantity | Quick

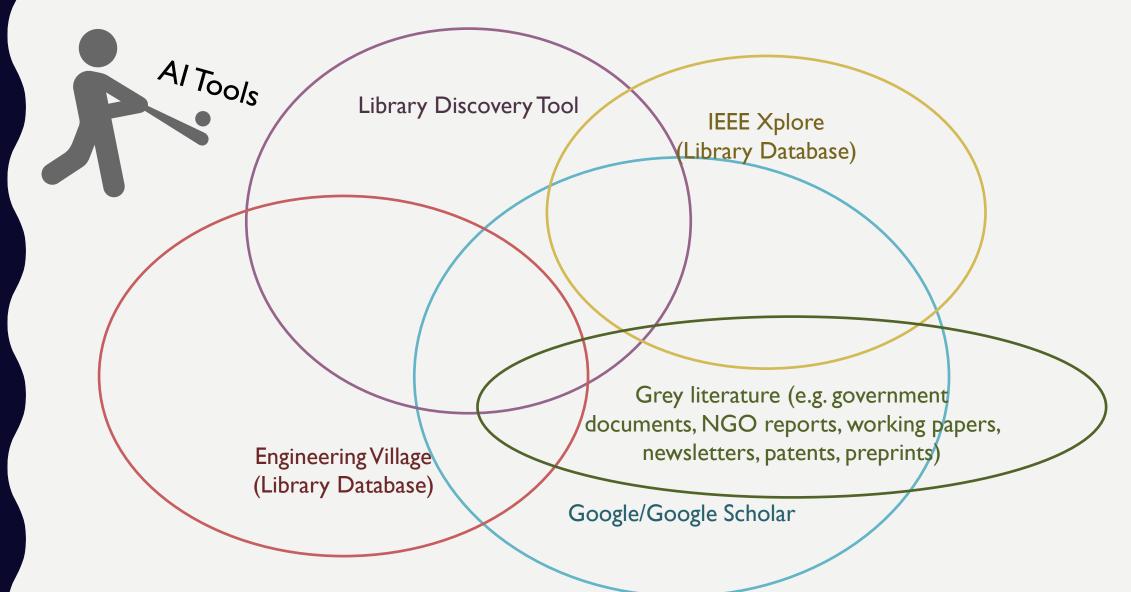
### LIBRARY DATABASES



Depth | Quality | Thorough



# WHERE SHOULD YOU SEARCH?



# HOW IS USING CHATGPT DIFFERENT FROM GOOGLING?



# HOW ARE THEY DIFFERENT?

### **GOOGLE SCHOLAR**

An index of webpages with scholarly contents

List-based results, at a very quick speed

Retrieve results based on keyword matching, and other ranking factors (e.g. location, page linking)

### **CHATGPT**

Human-like responses to prompts

Conversation-based results, often very persuasive

Generate new text based on what it has learned about patterns and sequences of words from massive training datasets



# **SOME IMPLICATIONS**

### FOR INFORMATION SEARCHING AND RELATED SKILLS

- Prompt engineering (e.g. <u>CLEAR framework</u> = Concise, Logical, Explicit, Adaptive, Reflective)
- Cite contents generated by AI tools properly (e.g. <u>IEEE citation style for AI-generated content</u>)
- Think critically about capabilities and limitations of these new tools and platforms
- Navigate the information landscape critically (e.g. hallucination, deepfake)



STRATEGIES AND CONSIDERATIONS

# THINK, PAIR, SHARE

Talk to the person next to you for 5 minutes:

What are some ways to ensure that the information you find online is accurate and reliable?



# EVALUATING INTERNET INFORMATION

### What do fact checkers do?

- Spend more time scanning the snippets on the results page before clicking
- Know what you read before you read it
- More lateral reading than vertical reading



# BE MORE INTENTIONAL

## Consider these factors as much as possible

- Who is behind the information?
- What is the evidence?
- → What do other sources say?

- → Who is the intended audience?
- → What is scope/depth/breadth?
- How current is the information?

# TYPES OF INFORMATION SOURCES

WHAT IS CONSIDERED SCHOLARLY?

# NAVIGATING SCHOLARLY INFORMATION

ANSWER POLL QUESTIONS ON MENTIMETER



# CONTEXTUALIZE THE PROBLEM WITH INFORMATION

You need to design a playground for a neighbourhood

Economical

Environmental

**Political** 

Legal

Cultural

Social

Historical

Government data and statistics

Trade magazines

Photos

Encyclopedias

Standards and codes

Materials properties

Books

Handbooks

Conference proceedings

Maps

Technical reports

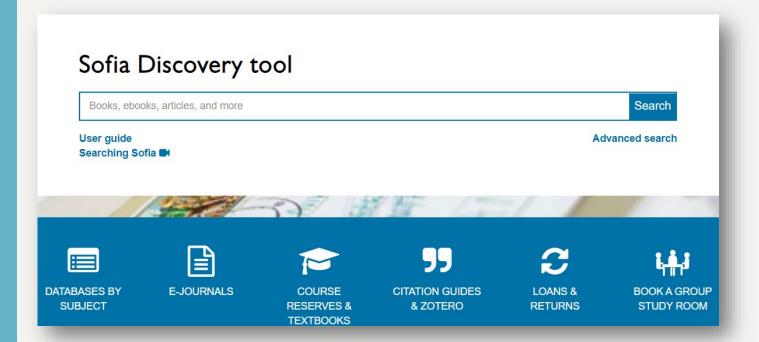
Research articles

Van Epps, A., & Cardella, M. (2013). Scout the lay of the land: Understanding the broader context of a design project. In M. Fosmire & D. Radcliffe (Eds.), Integrating Information into the Engineering Design Process (pp. 101-114). West Lafayette: Purdue University Press.

# LIBRARY DISCOVERY TOOL

THE MAIN LIBRARY SEARCH TOOL

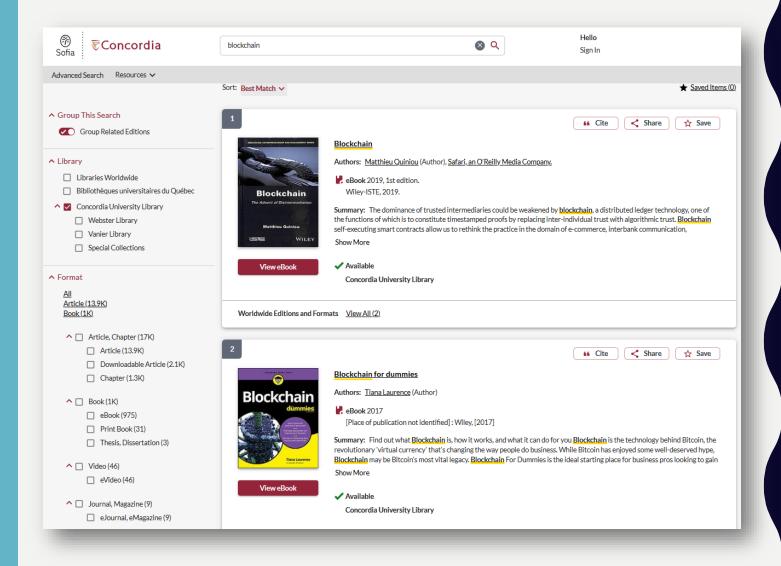




### LIBRARY DISCOVERY TOOL

- Front and centre on the library homepage
- A good starting point for a general search across library resources
- Answer questions such as:
  - o Does the library have this book?
  - Does the library have this journal article?
  - Does the library have some background/overview information on a topic?





### LIBRARY DISCOVERY TOOL

- A search for a broad keyword such as blockchain
- Refine options include:
  - Format types (e.g. ebooks)
  - Publication years
- Shows results with Concordia full text access by default
  - Easily expand to other university libraries in Québec or Worldwide
  - Easily make requests for items from other university libraries

# LIBRARY DATABASES

OVER 400 OF THEM ORGANIZED BY DISCIPLINE

# Engineering Village™









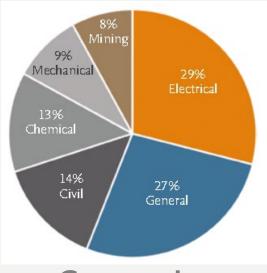
### LIBRARY **DATABASES**

- Content is usually more in-depth and specialized
- More options to search, expand, or refine
- Answer questions such as:
  - Where can I find journal articles on a specific aspect of a topic
  - How can I combine different elements/keywords in a search?

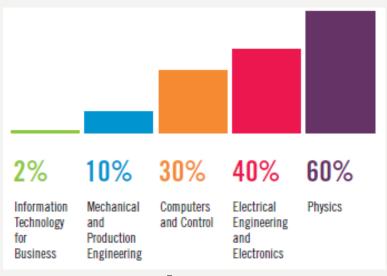
# ENGINEERING VILLAGE

A CLOSER LOOK AT AN ENGINEERING DATABASE

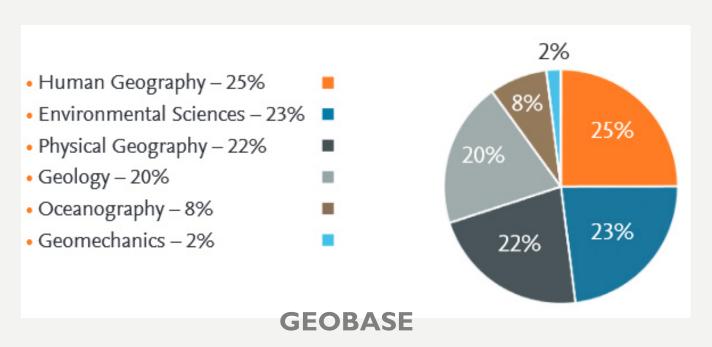








Inspec



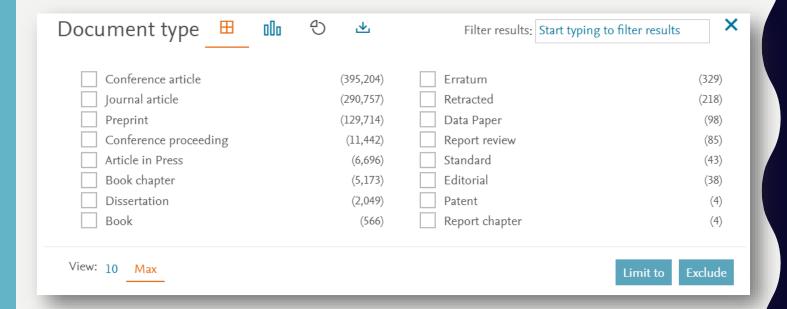
# WHAT CONTENT IS INCLUDED?

With a coverage of 1884 to the present, the three indexes

Compendex, Inspec, and

GEOBASE provide content in general engineering as well as more specialized engineering disciplines.





# IS THE CONTENT PEER-REVIEWED?

- Journal articles are peer-reviewed
- Some conference articles/proceedings are peer-reviewed
- Recently, preprints have been included in the results in Compendex
- Preprints are NOT peer-reviewed, but are helpful in exploring the latest papers

## Thermal effects and anomalies in the low-temperature plasticity of crystals Malygin, G.A. (A.F. Ioffe Physicotech. Inst., St. Petersburg, Russia) Source: Physics of the Solid State,

Database: Inspec

Document type: Journal article (JA)

Detailed Show preview V Cited by in Scopus (2)

"Full text" button, if one exists

"Find it @ Concordia" button to check the library's other subscriptions. If not available, request it via **Interlibrary Loan**.

Full text 7

Findit @Concordia

# HOW TO ACCESS FULL TEXT?

Full text may be readily available. If not, the "Find it @ Concordia" button can help check for full text availability in the library.



### **₹Concordia**

Concordia > Library > Sofia > Find full text

Contactless Book Pickup and Article/Chapter Scan & Deliver are available, see <u>Library services and resources during COVID-19</u>.



VIEW FULL

BROWSE RELATED

ARTICLES

#### Distribution pattern of heavy metals in soils with respect to typical land uses in electron

Article, Chapter

Authors: Wen-Cheng Wu

Publication: Zhongguo Huanjing Kexue/China Environmental Science, Volume:38, Issue:7, Page(s):2632-2638

Published: 2018 ISSN: 1000-6923

1 Access full text via journal or collection links below. We were unable to find direct full text links for this item.

Check for print holdings

IN LIBRARY

Print copies at your library

Check for print holdings



Request a copy of this item



Request via Interlibrary Loan

### **INTERLIBRARY LOAN**

- If Concordia Library doesn't have it, use Interlibrary Loan
- Takes a few days or longer to process depending on the item

# AOUICK DEMOOF ENGINEERING VILLAGE



### Help & how-to

### Subject & course guides







**Engineering & Computer** Science



Fine Arts



Humanities





Social Sciences



Interdisciplinary

#### General guides



#### Finding

- > Articles (What's peer review?)
- > Open Access journals
- > Primary sources
- > More...



### Citing

- » MLA style
- > Chicago style
- > Zotero (formerly RefWorks)
- More...



#### Evaluating

- > Books
- Articles
- Media
- » More...



### Writing

- > Annotated bibliographies
- > Literature reviews
- Book reports
- > Research papers





#### Using

- > Discovery Search
- > Find it! @ Concordia
- » More...



### **HELP & HOW-TO GUIDES**

Subject guides are available for all schools, including one for Engineering and Computer Science.

General guides cover various topics from peer review articles to annotated bibliography.



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Feel free to contact me for an appointment inperson or online.

#### **SCHEDULE AN APPOINTMENT**

I can help you with library resources and services, including but are not limited to:

- Locate specific items (e.g. books, articles)
- Navigate resources related to engineering and computer science
- · Literature searching
- · Citations and references
- · Recommend new resources

### **ASK A LIBRARIAN**

Contact the library in-person, by email, chat, or phone.

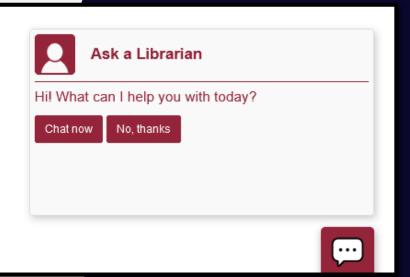
Contact your subject librarian (that's me!)

# Today's opening hours

Webster Library: 24 hours Vanier Library: 24 hours

Grey Nuns: Closed until October 2022

Look ahead



# QUESTIONSP

# SELF-REFLECTIVE QUESTIONS



https://tinyurl.com/ycxxxf6r