

Computer Science library information resources

Searching Bibliographic databases

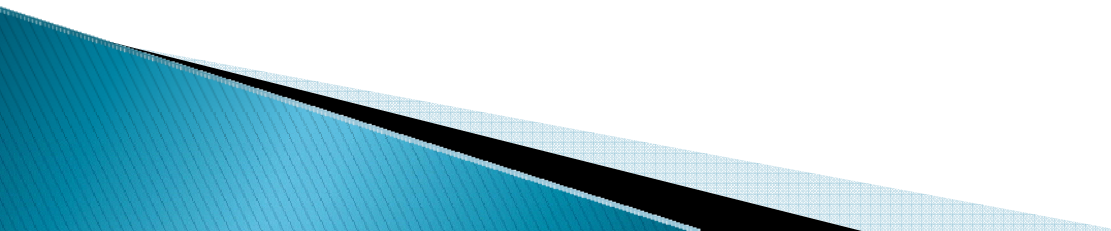
Tony Wilson Academic Liaison Librarian for Computer Science

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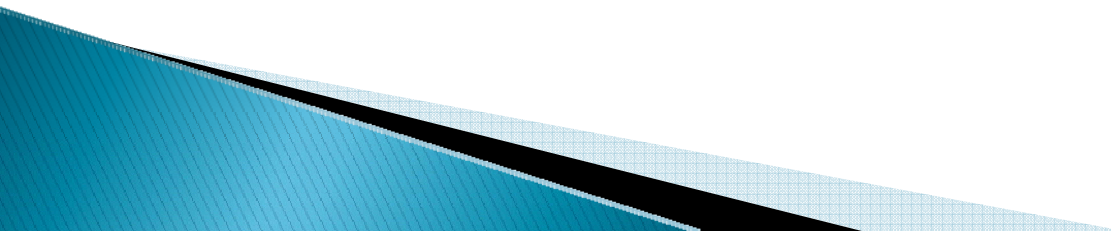


Now

- ▶ Presentation on information resources and search techniques

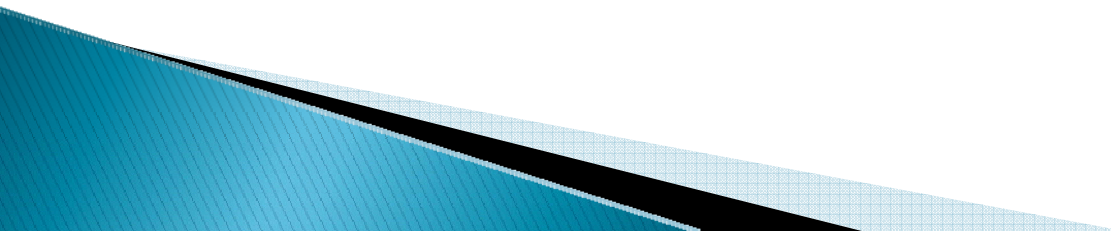


Later today

- ▶ Practical opportunity to search Computer Science databases with assistance available
 - ▶ 12.15 CS/006
 - ▶ 14.15 CS/007
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Session aims

After today you should:

- ▶ be aware of a range of resources
 - ▶ be able to select appropriate resources to use
 - ▶ understand the various access routes
 - ▶ know some effective searching techniques
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Electronic resources – web search engines and subject gateways

▶ Web search engines

- Google, Google Scholar (now with links to the Library's electronic holdings), All the Web etc.
 - accuracy and authenticity concerns

▶ Internet subject gateways

- specialise in subject related information
- only authoritative material indexed
 - *Intute: Science, Engineering and Technology via INTUTE*
 - links to this and many other web resources from the *Subject Resources* area on the Library home page

Searching for journal references

- ▶ Polack, F. (2001) 'A case study using lightweight formalism to review an information system specification' *Software: practice and experience*, 31 (8) pp. 757–780

Electronic resources – e-journals

- ▶ Electronic journals
 - full text of printed material online
 - around 11,000 now available
 - Access via the Library catalogue ('Find it'), 'SFX' links in databases or via the URL below

<http://sfx.york.ac.uk/sfxlcl3/a-z>

Electronic resources – theses

- ▶ Index to Theses – lists all UK PhD theses and includes an abstract for each. Non–York theses can be obtained via InterLibrary loans
- ▶ Access via Reference subject category in MetaLib
- ▶ EThOS – Electronic Theses Online Service
 - Available from the British Library

Electronic resources – Bibliographic databases

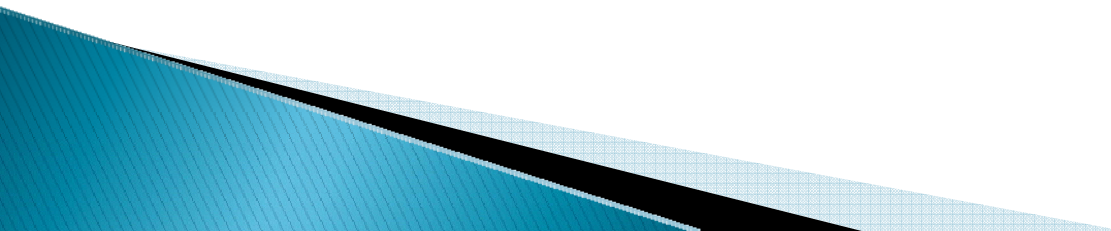
- ▶ Electronic indexes of published work
- ▶ Examples, INSPEC and Web of Science
 - databases cover different subject areas and materials
 - not limited to the Library's collections
 - always use more than one database!
- ▶ Access via Computer Science subject category in MetaLib

Some Key Computer Science databases

▶ Computer Abstracts

Indexes over 200,000 abstracts dating back to 1987.

Covers all major subject areas including:

- Artificial Intelligence
 - Communications and networks
 - Computer theory
 - Database and information systems
 - Hardware
 - Programming
 - Systems organization
- 

Some key Computer Science databases

- ▶ Science Citation & Proceedings Indexes (via the Web of Knowledge)
 - General Computer Science 1900 – date
 - citation searching
 - *Proceedings* section for conferences & meetings
 - Access using your University of York network username and password

Some Key Computer Science Databases

- ▶ **Zetoc (British Library)**
 - multi-disciplinary 1993 to date
 - Top 20,000 most requested journals from the BL
 - includes *Zetoc Alert* current awareness service
 - University of York network username and password

Some Key Computer Science Databases

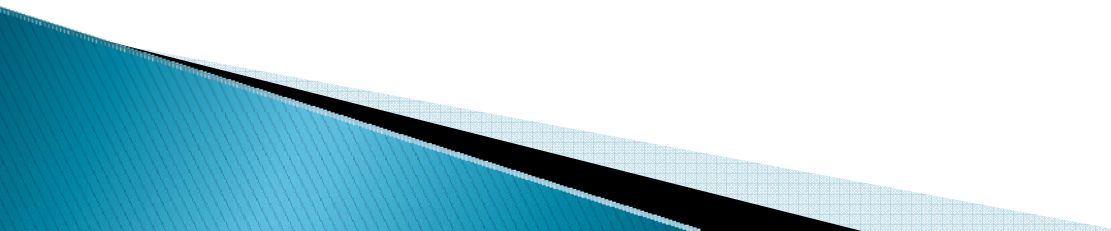
▶ INSPEC

leading abstract publication for information in physics, electronics, electrical engineering, computer science and information technology.

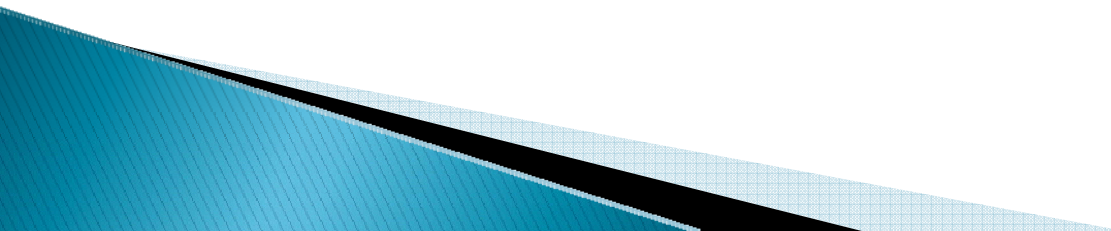
- updated weekly
- 1969–present
- Login using your University of York username and password

Effective Searching

1. Define your topic
2. Plan your searching strategy
3. Search! – indexes, databases, and other sources
4. Review your search results
5. Locate and read the full texts!



Step One: Defining

- ▶ Define your topic by asking:
 - where should I search?
 - are there any areas I am NOT interested in?
 - ▶ Think of keywords, synonyms, and related terms
 - background reading
 - own professional knowledge
 - ▶ Select your information resources
 - consider subject coverage, authority, and availability
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Step Two: Planning

- ▶ Plan out your search on paper
 - easy to keep a record if computers crash!
 - helps clarify your searching strategy
- ▶ Consider the scope of your search
 - full review or answer to a question?
 - what is the time period you are searching within?
 - try a quick simple search
- ▶ Search for synonymous terms
 - use truncation or wildcards as appropriate (e.g. * ?)
 - e.g. `col?r` will find colour, color (but also coloniser)
 - e.g. `comp*` will find computer, computers, computing etc

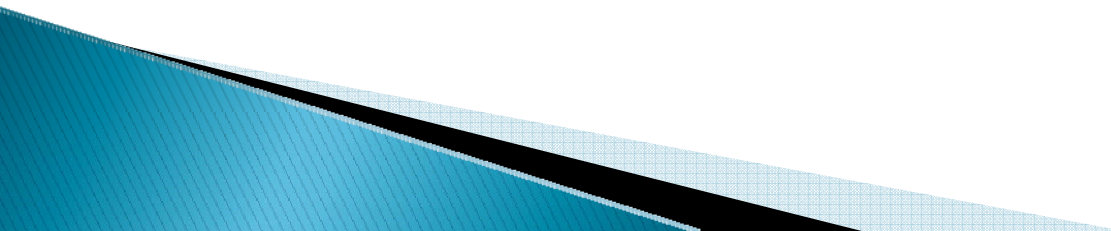
Step Three: Searching

- ▶ Search for your keywords & phrases
 - use logical (Boolean) operators to link terms:
 - OR finds results that contain ANY of your terms
 - AND finds results that must contain ALL of your terms
 - NOT eliminates results that contain UNWANTED terms
 - thesaurus or index also particularly useful
- ▶ Advanced searches can be phrased in various ways
 - build searches up step by step to avoid simple errors

Step Four: Reviewing

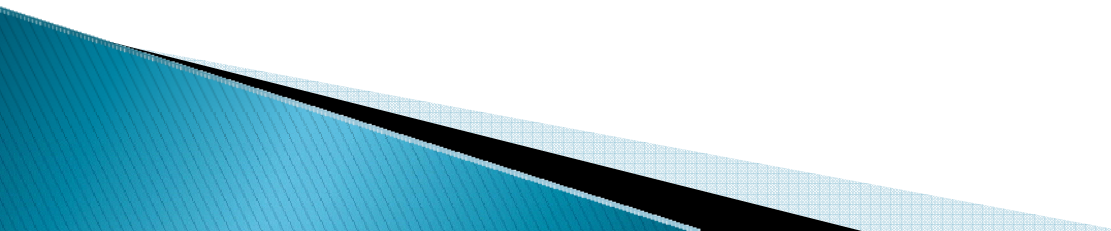
- ▶ When you have some results ask yourself
 - do they answer your question?
 - are they appropriate for your needs and of sufficient quantity AND quality
- ▶ Be prepared to search more than one database for a comprehensive search
 - INSPEC does NOT cover everything you need
 - if you are unsure of which ones to use – ask!
- ▶ Leave enough time to find, and read the full articles!!!

Troubleshooting Searches

- ▶ Too few or no results?
 - are my keywords the right ones?
 - am I using the 'right' database for the subject?
 - ▶ Too many results?
 - should I include more specific term(s)?
 - could I eliminate unwanted concepts from my results?
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Referencing and citations

- ▶ Use the IEEE style
- ▶ Very important to be consistent in style, do not vary your style within your text or bibliography



Items not held in the Library

- ▶ Remember e-journals
- ▶ Inter-library loans (ILLs)
 - First 10 loans or photocopy requests at £2 each, extra I.L.L.s cost £8 each
 - register for online requests by following the inter-lending link on the library catalogue
 - journal articles – posted photocopies to any address or use electronic delivery to your desktop, books & other materials – loaned
- ▶ Boston Spa minibus on alternate Wed/Fridays
 - Book via the library catalogue.

Ongoing assistance

- ▶ Help is available from Tony Wilson , Liaison Librarian for Computer Science.

Use lib-science@york.ac.uk to contact me or ask for me at Help and Information