Computer Science library information resources

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Session aims

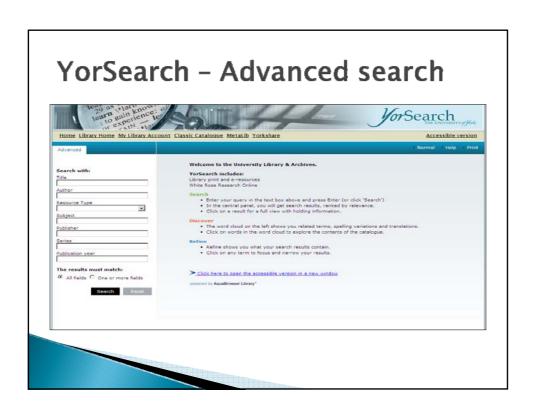
After today you should:

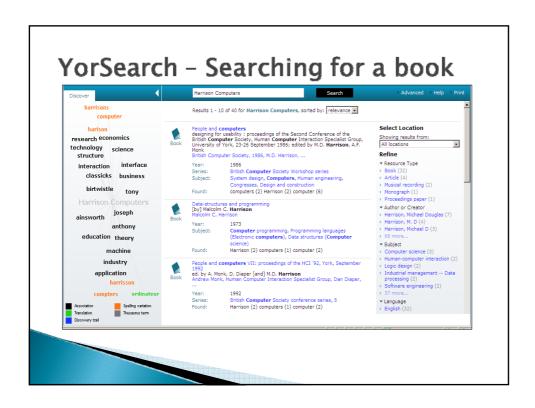
- be aware of a range of resources
- be able to select appropriate resources to use
- understand the various access routes
- know some effective searching techniques

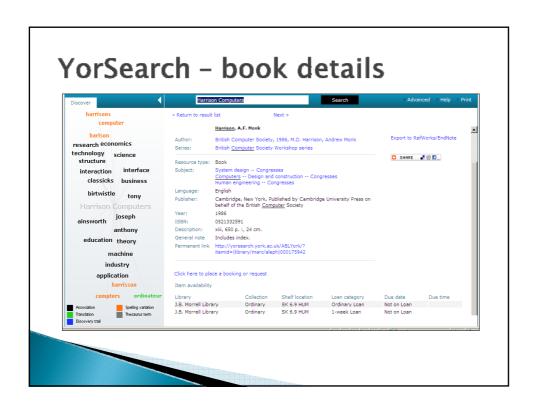
Electronic resources - web search engines and subject gateways

- 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
 - <u>Intute</u>: Science, Engineering and Technology via INTUTE
 - links to this and many other web resources from the Subject Resources area on the Library home page

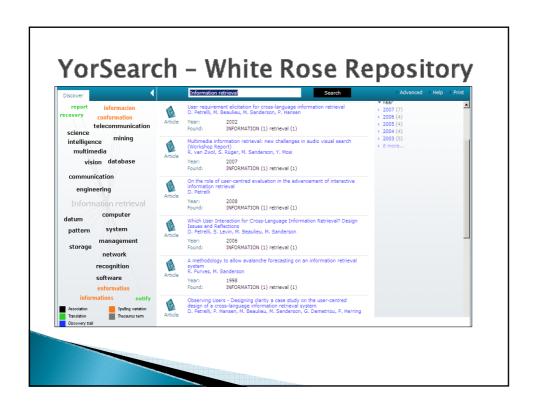
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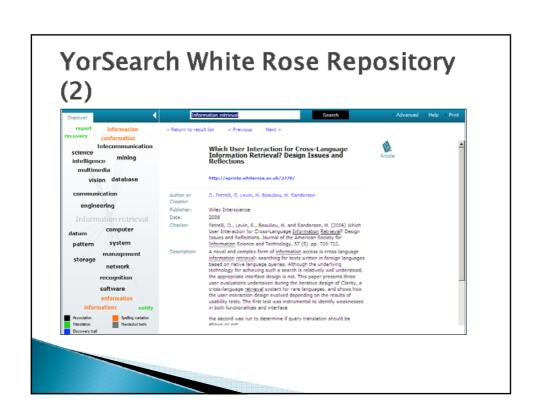














Searching for journal references

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

- IEEE Xplore Provides access to:
 - All IEEE and IET journals, magazines, transactions and conference proceedings, and all approved and published IEEE standards, excluding drafts.
 - Complete backfiles to 1988
 - Selected content back to 1913
- ScienceDirect Full text database.

Electronic resources - e-books

- Credo reference digital reference library that includes over 200 searchable and browsable reference books.
 - Access through reference category in Metalib.
- Lecture Notes in Computer Science archive also available.
 - Access through Computer Science category in Metalib

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
- Proquest Dissertations and Theses most comprehensive collection of dissertations and theses
- 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 and approximately 16,000 conference proceedings
 - 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

- Define your topic
- 2. Plan your searching strategy
- 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

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?

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)
 - £2 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.

aw43@york.ac.uk or ask for me at Help and
Information