Part 7

- *Literature sources*
- *Databases and search engines*
- *Queries*

Research Methods in Computer Science

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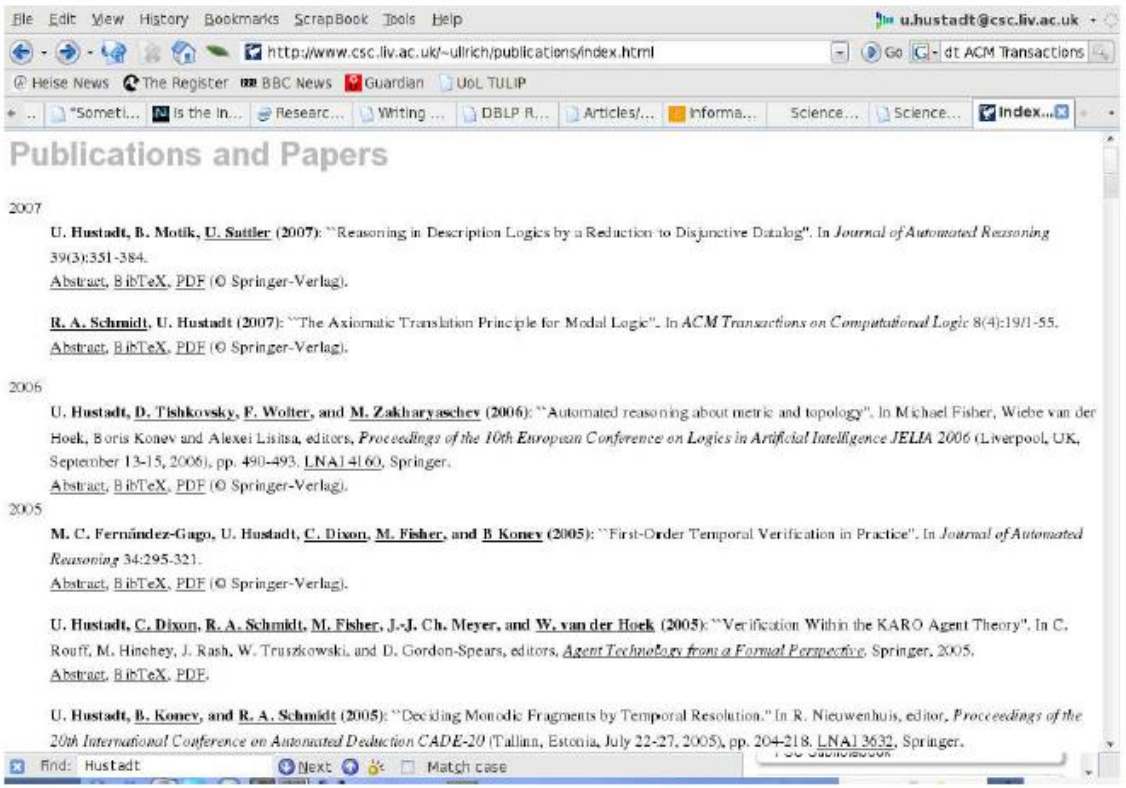
Searching for literature

- What are you trying to find out?
  - ⇝ Try to specify exactly what you need to know
- What type of information to you want to find?
  - ⇝ An answer to a specific question?
  - ⇝ An overview of a subject area?
  - ⇝ A specific document?
- Why do you need this information?
  - ⇝ Literature survey: Information needs to be comprehensive
  - ⇝ Short essay: Limited number of sources is sufficient
- How quickly do you need the information?
  - ⇝ Immediately: Internet
  - ⇝ In a day: Library
  - ⇝ In a week: Inter Library Loans

Where to search: Sources

Sources for literature on the internet:

- Freely available collections (personal/institutional)



- Publishers' websites/databases
- Literature databases

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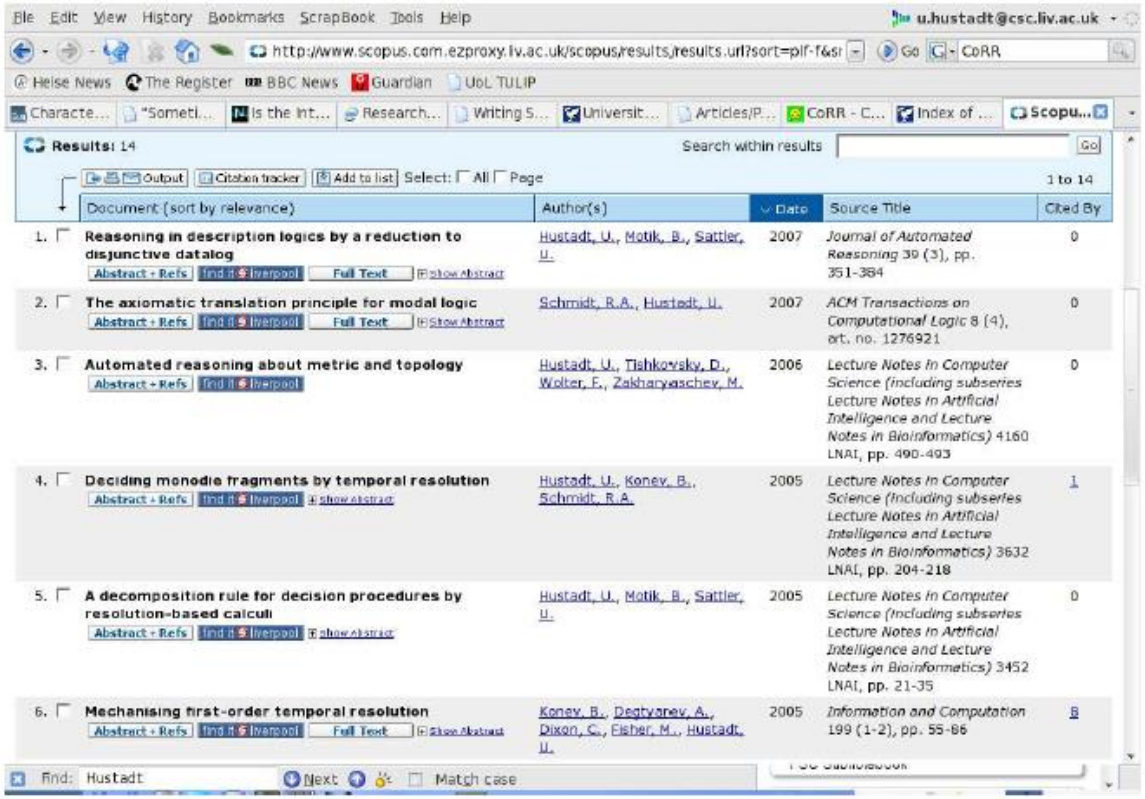


Where to search: interrelationship of sources

1. Authors submit paper to conference/journal for peer review
2. If accepted, the paper is revised by the authors and submitted to conference/journal editor
3. The paper is processed to bring it into the publisher's format (typesetting/layout)
4. The paper is then
   - included in the publisher's database,
   - made available on-line via the publisher's website, and
   - possibly published in printed form

   (not necessarily in that order)
5. Literature databases
   - collect the bibliographic information from several publishers, and
   - add additional information (references with links, citation index)
   - link back to publisher for full-text of papers

Databases and search engines: Publishers

- ACM Digital Library

  http://portal.acm.org

- IEEE Xplore

  http://ieeexplore.ieee.org

- ScienceDirect (Elsevier)

  http://www.sciencedirect.com

- SpringerLink

  http://www.springerlink.com

- Wiley Inter-Science

  http://www.interscience.wiley.com

- …

Databases and search engines: Literature databases

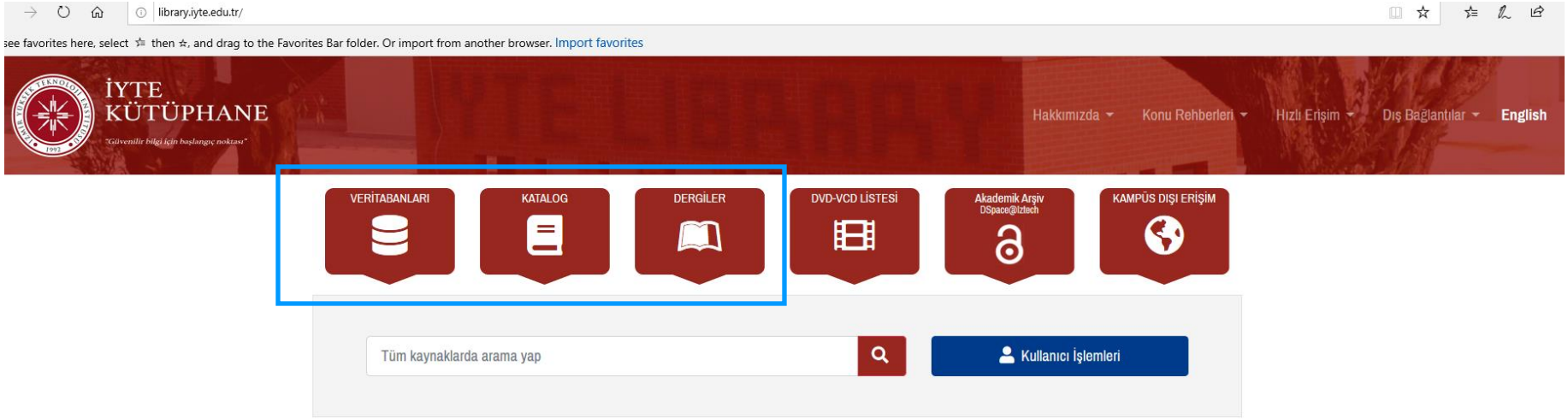
Scopus	Covers 14,000 journals and proceedings series; incl. ACM, Elsevier, IEEE, Springer `http://www.scopus.com/`
Web of Knowledge	Covers 22,000 journals and 192,000 proceedings; incl. ACM, Elsevier, IEEE, Springer `http://isiknowledge.com/`

Databases and search engines: Web search engines

Freely available (scholarly) web search engines include:

Citeseer	Digital library of 750k freely available papers in computer and information science `http://citeseer.ist.psu.edu`
Google	General internet search engine `http://www.google.co.uk`
Google Scholar	Searches scholarly literature on the web. `http://scholar.google.com`
Scirus	Searches journals (ScienceDirect) and web resources `http://www.scirus.com/`
Windows Live Search Academic	Academic search engine - search academic journals and content for article titles, author names, article abstracts, and conference proceedings. `http://academic.live.com/`

IYTE Library



IYTE Library: Databases

libguides.iyte.edu.tr/az.php

then ☆, and drag to the Favorites Bar folder. Or import from another browser. Import favorites

Library / LibGuides / A-Z Databases

A-Z Databases

Use of these resources is restricted to current Institute of IYTE faculty, students, and staff, and may be used for individual research purposes only. Any other use is prohibited. Here are some good rules of thumb.

Off-Campus access, is a service for IYTE Members (IYTE students, full time faculty and staff) to connect to Library and Information Center electronic resources from off campus site. (Databases, Periodicals, E-Books, etc.) There are two ways to access our subscription databases from off-campus:

1- Access via Ezproxy with your IZTECH email address and password.

2- Access all databases by making proxy settings in your browser. You can find the link below to make proxy2 settings for Explorer, Chrome and Firefox.

http://libguides.iyte.edu.tr/proxy2ayarlari

For problems and Comments: library[at]iyte.edu.tr Phone: 750 6345 or 750 6330

Discover Scholarly Journals Easily!

Read IZTECH's full-text electronic journals on your computer, tablet or smartphone using the BrowZine. Easily discover, read, and monitor the key journals in your field.

To use from your computer: http://browzine.com/libraries/712/subjects

Download the BrowZine app from the appropriate app store:

Available on the App Store	ANDROID APP ON Google play	amazon Available at amazon appstore for Android
All iPads, iPhones and iPod Touches with iOS v7.x+	Android Tablets with OS v4.0+	Kindle Fire HD Tablets

Guide and Detailed Information for Use: http://libguides.iyte.edu.tr/c.php?g=368970

IYTE Library: Databases

146 DATABASES | Search for Databases | Go

All Subjects | All Database Types | All Vendors / Providers

All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #

130 Databases found

A

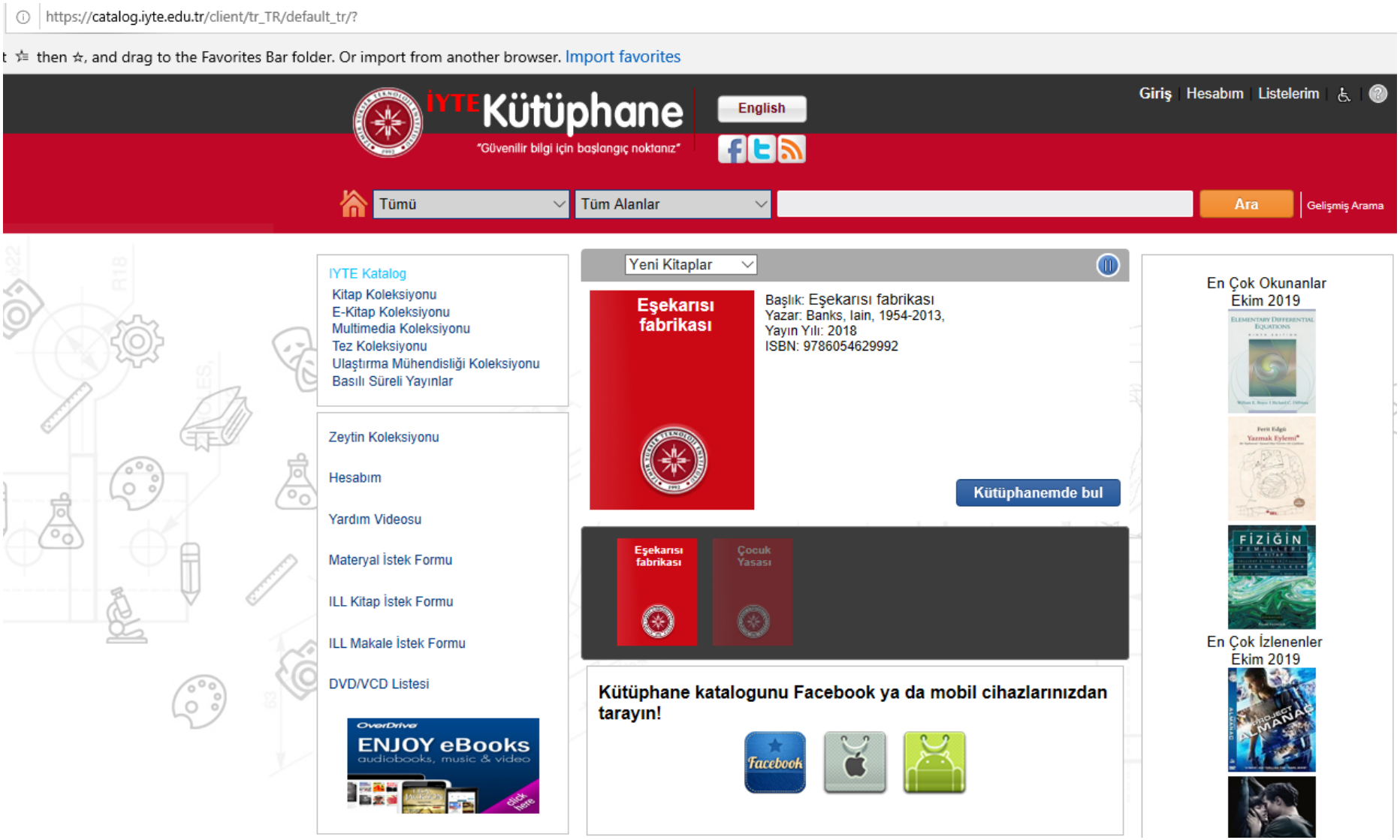
- Academic Search Complete
- ACM Digital Library
- American Chemical Society (ACS)
- American Institute of Physics
- American Physical Society
- Applied Science & Business Periodicals Retrospective: 1913-1983 (H.W. Wilson)
- Applied Science & Technology Index Retrospective: 1913-1983
- Arkiv Veritabanı
- Art & Architecture Source — Trial
- Art History Research net (AHRnet) (Formerly - Arts: Search)
- ASCE Research Library
- ASEE - American Society for Engineering Education
- ASME Digital Collection (Journals and E-Books)
  more...
- AuthorMapper
- Avery Index to Architectural Periodicals

New / Trial Databases

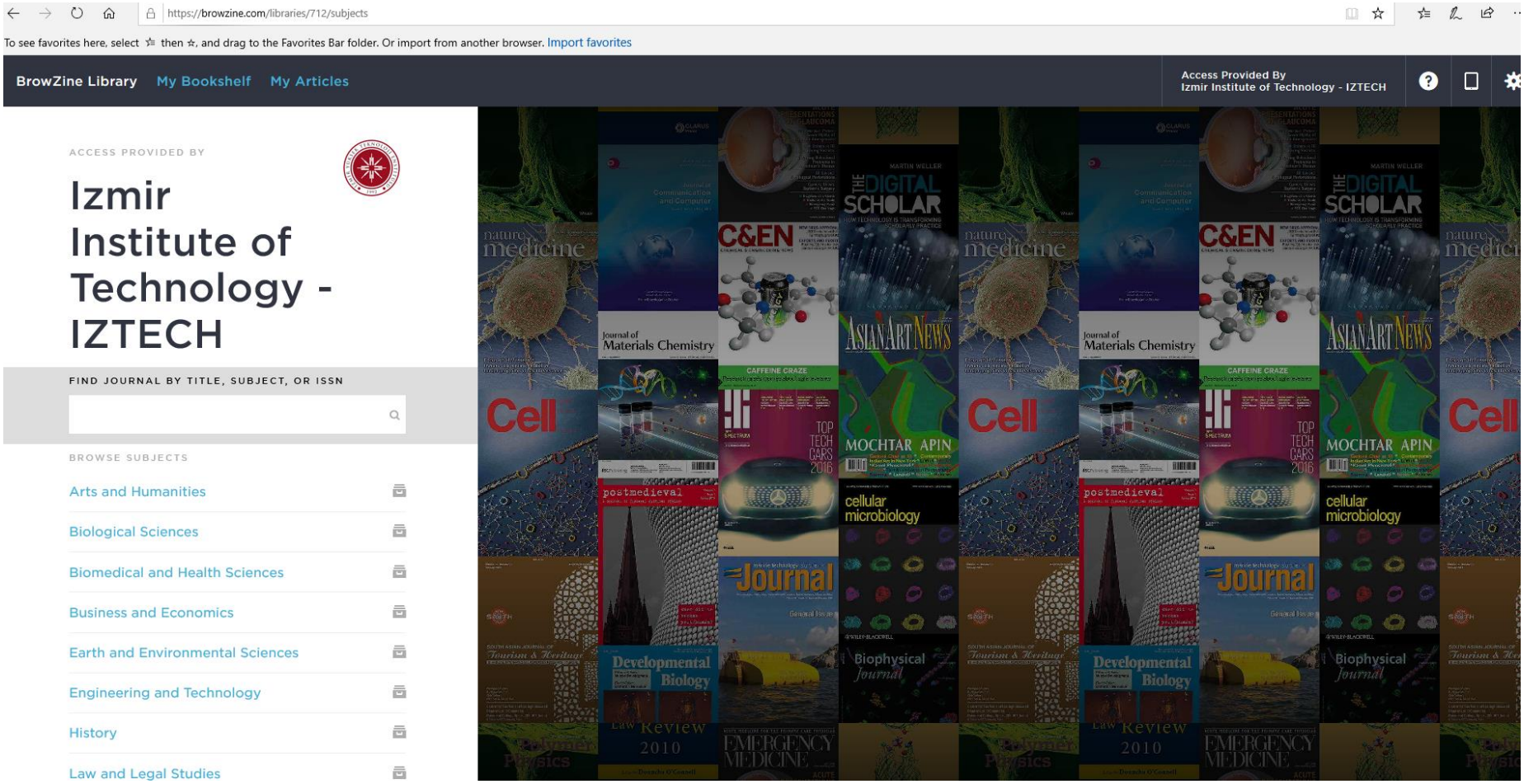
The following databases are newly acquired or being evaluated for future subscription.

- Art & Architecture Source — Trial
- dMags - Dijital Dergi Mağazası — New
- eBook Academic Collection — Trial
- Engineering Source — Trial
- High Throughput Experimental Materials (HTEM) (OA) — New
- InCites — New
- intihal.net — Trial
- iThenticate — New
- Journal Citation Reports (JCR) — New
- JSTOR Archive Journal — New
- Legal Yayıncılık: Dergi ve Kitaplar — Trial
- Legalbank Yargı Kararları ve Mevzuat Bankası — Trial
- MEDLINE Complete — Trial
- Nature Journals All and Academic Journals — New
- Palgrave Macmillan Journals — New
- ProQuest Dissertations and Theses Global Full Text (PQDT Global FT) — New
- Taylor & Francis E-Books — New

IYTE Library: Catalogue



IYTE Library: Journals



Databases and search engines: Comparison

There is an important difference to remember:

Library catalogue: Allows to search for a journal, but not for journal articles

Publishers' and literature databases: Allow to search for journal articles, but not in the full-text journal articles

Web search engines: Allow to search in the full-text of journal articles, but have difficulties with their structure

Databases and seach engines: Comparison

- Literature databases cover a vast number of journals and conferences, but
  - they do not cover all journals and conference
  - they do not cover textbook, handbooks, collections of articles in book form
  - they do not cover workshops and similar scientific meetings
  - they do not cover technical reports and pre-prints
- Web search engines provide much better coverage of these types of publications, but
  - typically also return a lot of irrelevant material to a query
  - leave it to the user to distinguish high quality from low quality material

Queries

- Search terms might be simple keywords, phrases, or consist of field identifiers, modifiers, operators, and keywords

  Examples: induction
  "mathematical induction"
  induct∗
  author = Ambuhl
  author like Ambuhl
  author soundex(Maier)

- Queries are typically constructed from search terms using boolean operators

  Examples: induction AND mathematical
  induction OR deduction
  induction AND NOT recruitment

Queries

- Queries are typically constructed from search terms using boolean operators
  - AND retrieves records where ALL of the search terms are present, induction AND mathematical
  - OR retrieves records containing either one term OR another induction OR deduction
  - NOT retrieves records NOT containing a particular term NOT recruitment
- The set of all correct queries for a particular search engine is its query language
- Typically, different search engines use different query languages

Keywords

- Only the right keywords will correctly identify useful information
- Mode of search is very important:
  - narrow: you are looking for exactly one record
    - ⇝ use a search term which is as specific as possible
      "cell microprocessor" instead of cell
    - ⇝ use additional criteria
      - publication date year = 2006
      - type type = journal
      - language language = english
      - publisher publisher = Springer
  - wide: you are looking for all records relating to a subject

Keywords

- Only the right keywords will correctly identify useful information
- Mode of search is very important:
  - narrow: you are looking for exactly one record
  - wide: you are looking for all records relating to a subject
    - ⇝ try alternative words/phrases
      microprocessor / computer processor / computer chip
    - ⇝ try alternative spellings
      judgement / judgment
    - ⇝ try wildcards
      gene∗ for genes, genetics, genetically

Conducting a search

1. Construct a query
2. Search the databases, starting with the literature databases then moving to web search engines
3. Record all useful references
   $\rightsquigarrow$ some databases allow export in a format that can be imported in RefWorks or EndNote

   Record enough information for someone to be able to find it again
4. After having searched two or three sources, review the progress of the search

   too little relevant sources found so far $\rightsquigarrow$ modify query

Citing

https://link.springer.com/chapter/10.1007/978-3-642-02457-3_73

then ☆, and drag to the Favorites Bar folder. Or import from another browser. Import favorites

Learning Styles Diagnosis Based on Learner Behaviors in Web Based Learning

Authors | Authors and affiliations

Nilüfer Atman, Mustafa Murat Inceoğlu, Burak Galip Aslan

Conference paper

7 Citations | 16 Readers | 1.2k Downloads

Part of the Lecture Notes in Computer Science book series (LNCS, volume 5593)

Abstract

Individuals have different backgrounds, motivation and preferences in their own learning processes. Web-based systems that ignore these differences have difficulty in meeting learners' needs effectively. One of these individual differences is the learning style. For providing adaptively incorporated learning styles, firstly learning styles of learners have to be identified. There are many different learning models in literature. This study is based on Felder and Silverman's Learning Styles Model and investigates only active/reflective and visual/verbal dimensions of this model. Instead of filling out a questionnaire, learner behaviors are analyzed with the help of literature-based approaches so that learning styles of learners can be detected.

Keywords

Felder and Silverman's Index of Learning Styles | Web based Education

Citing

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%0 Conference Proceedings
%T Learning Styles Diagnosis Based on Learner Behaviors in Web Based Learning
%A Atman, Nilüfer
%A Inceoğlu, Mustafa Murat
%A Aslan, Burak Galip
%Y Gervasi, Osvaldo
%Y Taniar, David
%Y Murgante, Beniamino
%Y Laganà, Antonio
%Y Mun, Youngsong
%Y Gavrilova, Marina L.
%S Computational Science and Its Applications – ICCSA 2009
%D 2009
%I Springer Berlin Heidelberg
%C Berlin, Heidelberg
%@ 978-3-642-02457-3
%F 10.1007/978-3-642-02457-3_73
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End of part 7

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