

FINDING RELIABLE INFORMATION FOR ICOM4215

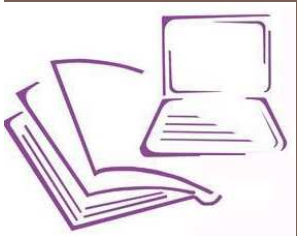
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Reference & Instruction

Engineering Library Liaison

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September 2010

Type of Information Resources

2

Information generated is published in the form of:

- Web Sites
- Encyclopedias
- Dictionaries, Handbooks
- Books
- Articles: Newspaper, Magazine or Journal
- Patents
- Standards and Codes
- Technical reports, conference proceedings, government documents, thesis or dissertations

And more ...

Literature

3

Traditionally these are arranged into two levels:

Primary or **Secondary**

Depending on the purpose and audience, these publications can be considered:

Scholarly or **Popular**

Primary Literature

4

- Reports the results of experiments, observations, and other scientific investigation
- First-hand information
- Written by the scientist who conducted the research

Published in the forms of:

- Articles in journals (particularly peer reviewed journals)
- Presentations (papers or posters) at professional meetings or conferences
- Government reports
- Patents

Secondary Literature

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- Provide background information
- Written by authors who summarize and synthesize the information in the primary literature

Published in the forms of:

- ▣ Articles in magazines and newspapers (popular press)
- ▣ Popular books and undergraduate textbooks
- ▣ Encyclopedia entries
- ▣ Web Sites

Types of publications

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- **Scholarly, Peer Review or Refereed Journals**
 - ▣ Report on research, written by experts and reviewed by other experts in the same field
- **Academic magazines**
 - ▣ Written by experts but its primary purpose is to disseminate knowledge
- **Newspapers and magazines**
 - ▣ Articles written by non-experts for the general public
- **Self-publications**
 - ▣ Blogs, Web sites (depending upon the source, author or publisher these can be primary or secondary)

Peer Reviewed Journals

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Also known as Refereed or Scholarly Journals

- Report on original research (primary literature)
- Written by experts and reviewed by other experts in the same field
- Longer articles (in-depth analysis of the topic)
- Scholarly or technical language (jargon)
- Include citations (references) to other published research in the field

Multidisciplinary Science Journals

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- Written by experts but its primary purpose is to disseminate knowledge
- May contain both primary and secondary literature
- Illustrations with glossy or color photographs

Examples:

- *Science*
- *Nature*



Popular Magazines

9

- Articles written by non-experts (staff writers and journalists) for the general public
- Shorter articles that provide broader overviews of topics
- Glossy or color photographs and illustrations
- Common or simple language

Examples

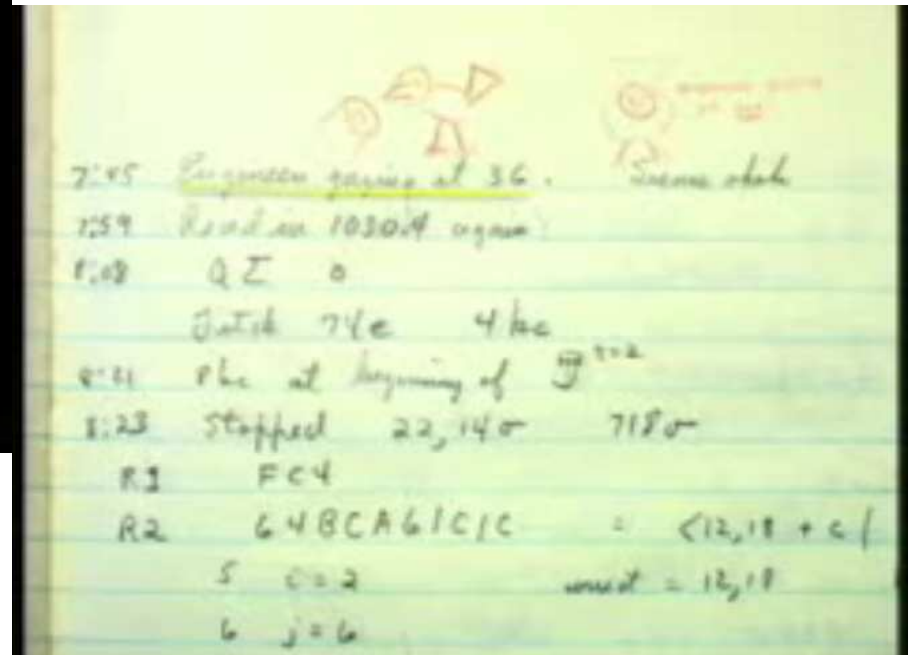
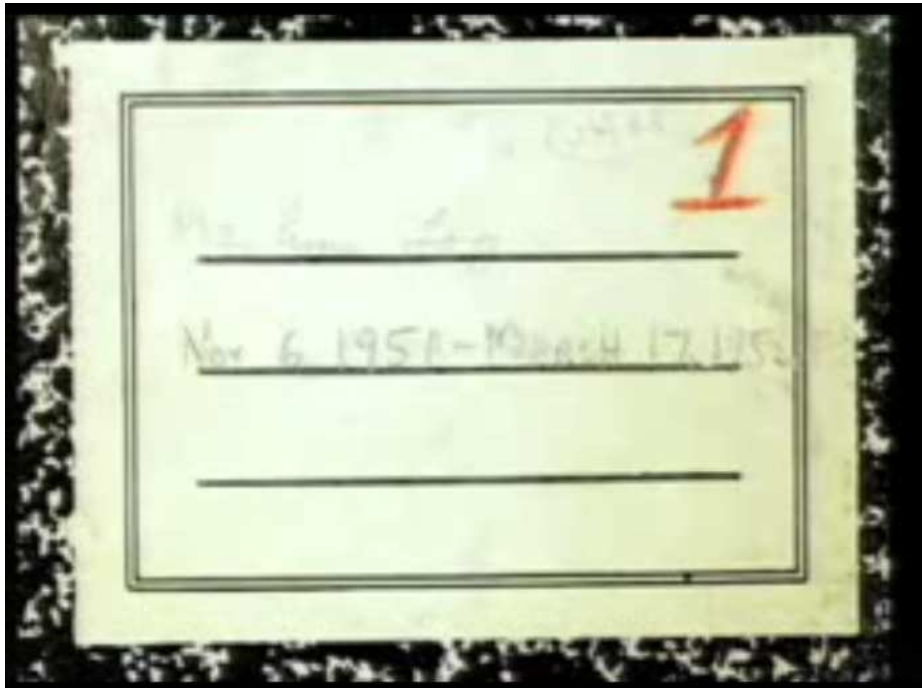
- *Muy Interesante*
- *Newsweek*
- *People*
- *Rolling Stone*
- *Sport Illustrated*
- *Time*



Logs

Primary or **Secondary**

10



George Dyson – “The birth of the Computer”

<http://video.google.com/videoplay?docid=4291223655367640053#>

Patent

Primary or **Secondary**

(12) **United States Patent**
Srinivasan

(10) **Patent No.:** **US 7,721,020 B2**
(45) **Date of Patent:** **May 18, 2010**

(54) **METHOD AND SYSTEM FOR REDUNDANCY SUPPRESSION IN DATA TRANSMISSION OVER NETWORKS**

2002/0184333 A1* 12/2002 Appelman 709/217
2005/0200871 A1* 9/2005 Miyata 358/1.11

OTHER PUBLICATIONS

(75) Inventor: **Udayakumar Srinivasan**, Hayward, CA (US)

Athicha Muthitacharoen, Benjie Chen and David Mazieres, "The Low Bandwidth File System", Symposium on Operating Systems Principles, 2001.

(73) Assignee: **Cisco Technology, Inc.**, San Jose, CA (US)

Neil T. Spring and David Wetherall, "A protocol independent technique for eliminating redundant network traffic", Proceedings of the 2000 ACM SIGCOMM Conference, Aug. 2000, pp. 8795, Stockholm, Sweden.

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 645 days.

* cited by examiner

(21) Appl. No.: **11/328,050**

Primary Examiner—Tariq Hafiz

Assistant Examiner—Jasjit S Vidwan

(22) Filed: **Jan. 9, 2006**

(74) *Attorney, Agent, or Firm*—Trellis IP Law Group, PC

(65) **Prior Publication Data**

US 2007/0174668 A1 Jul. 26, 2007

(51) **Int. Cl.**
G06F 13/00 (2006.01)

(52) **U.S. Cl.** **710/33; 710/4; 710/20; 710/34**

(57) **ABSTRACT**

Methods, systems and apparatus for suppressing redundancy in data transmission over networks are provided. Data segments are transmitted from a transmitting DPU to a receiving DPU. Initially, only signatures of the transmitted data segments are stored in a cache at the transmitting DPU. A data segment is stored in the cache only if it satisfies a redundancy-suppressing admission policy. Such a data segment is referred

intel® Intel® Pentium® III Processor with 512KB L2 Cache at 1.13GHz to 1.40GHz

Datasheet

Product Features

- Available at 1.13, 1.26 and 1.40GHz
- 512KB Advanced Transfer Cache (on-die, full speed Level 2 (L2) cache with Error Correcting Code (ECC))
- Dual Independent Bus (DIB) architecture: Separate dedicated external System Bus and dedicated internal high-speed cache bus
- Internet Streaming SIMD Extensions for enhanced video, sound and 3D performance
- Binary compatible with applications running on previous members of the Intel microprocessor line
- Dynamic execution micro architecture
- Power Management capabilities
- Optimized for 32-bit applications running on advanced 32-bit operating systems
- Flip Chip Pin Grid Array (FC-PGA2) packaging technology; FC-PGA2 processors deliver high performance with improved handling protection and socketability
- Integrated high performance 16KB instruction and 16KB data, nonblocking, level one cache
- 512KB Integrated Full Speed level two cache allows for low latency on read/store operations
- Quad Quadword Wide (256 bit) cache data bus provides extremely high throughput on read/store operations.
- 8-way cache associativity provides improved

Video

Scholarly or **Popular**

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George Dyson: The birth of the computer

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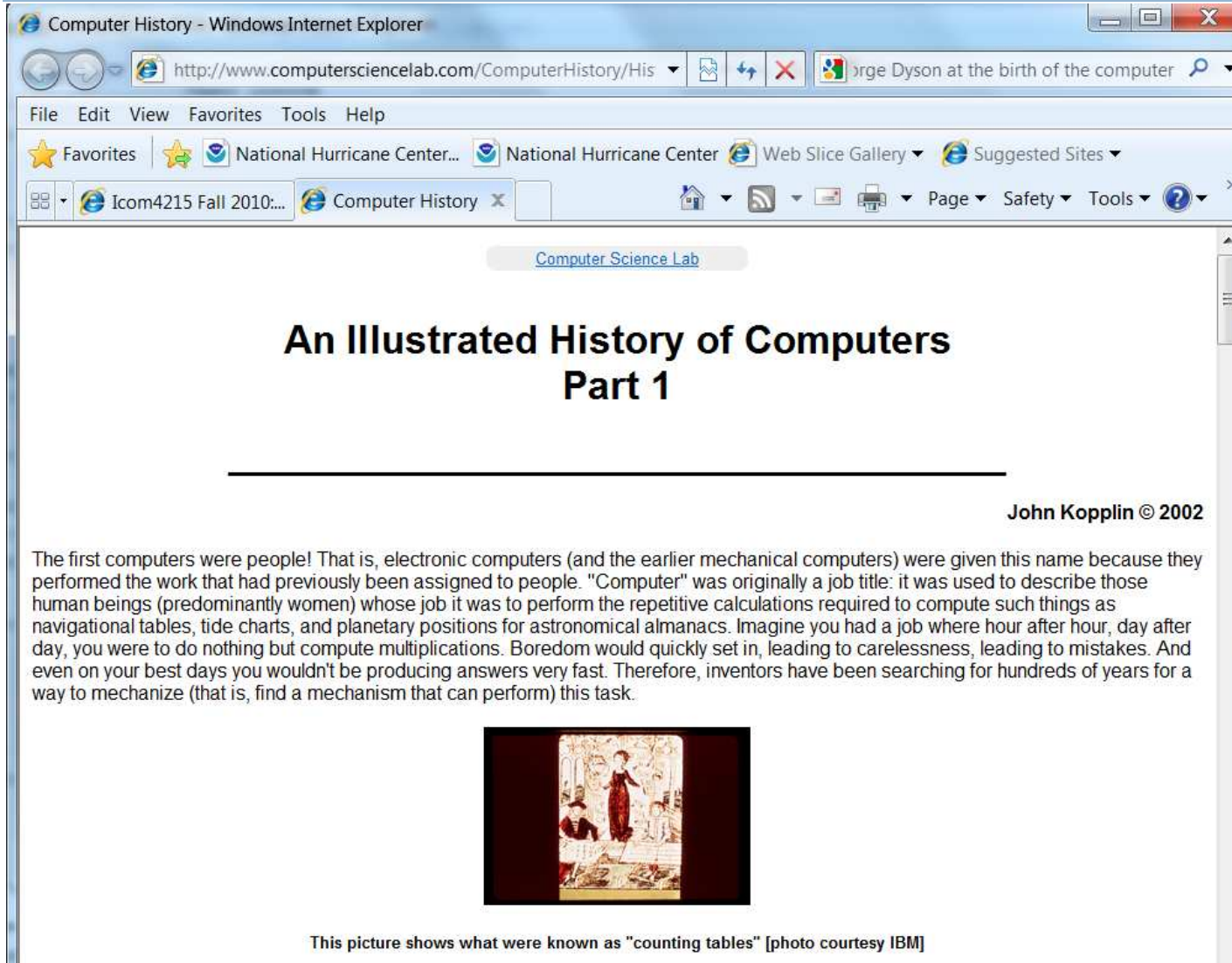
360p

Video player controls including play/pause, volume, and fullscreen buttons.

Web Site

Scholarly or **Popular**

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The screenshot shows a Windows Internet Explorer browser window. The title bar reads "Computer History - Windows Internet Explorer". The address bar shows the URL "http://www.computersciencelab.com/ComputerHistory/His...". The browser's menu bar includes "File", "Edit", "View", "Favorites", "Tools", and "Help". The Favorites bar shows "National Hurricane Center..." and "National Hurricane Center". The address bar also shows "Icom4215 Fall 2010..." and "Computer History". The main content area displays the text "Computer Science Lab" in a blue link, followed by the title "An Illustrated History of Computers Part 1" in a large, bold, black font. Below the title is a horizontal line. To the right of the line is the text "John Kopplin © 2002". Below this is a paragraph of text: "The first computers were people! That is, electronic computers (and the earlier mechanical computers) were given this name because they performed the work that had previously been assigned to people. 'Computer' was originally a job title: it was used to describe those human beings (predominantly women) whose job it was to perform the repetitive calculations required to compute such things as navigational tables, tide charts, and planetary positions for astronomical almanacs. Imagine you had a job where hour after hour, day after day, you were to do nothing but compute multiplications. Boredom would quickly set in, leading to carelessness, leading to mistakes. And even on your best days you wouldn't be producing answers very fast. Therefore, inventors have been searching for hundreds of years for a way to mechanize (that is, find a mechanism that can perform) this task." Below the text is a small, square, sepia-toned photograph of a woman in a red dress standing in a room with several large, rectangular tables covered with papers and books. The caption below the photo reads: "This picture shows what were known as 'counting tables' [photo courtesy IBM]"

Computer Science Lab

An Illustrated History of Computers Part 1

John Kopplin © 2002

The first computers were people! That is, electronic computers (and the earlier mechanical computers) were given this name because they performed the work that had previously been assigned to people. "Computer" was originally a job title: it was used to describe those human beings (predominantly women) whose job it was to perform the repetitive calculations required to compute such things as navigational tables, tide charts, and planetary positions for astronomical almanacs. Imagine you had a job where hour after hour, day after day, you were to do nothing but compute multiplications. Boredom would quickly set in, leading to carelessness, leading to mistakes. And even on your best days you wouldn't be producing answers very fast. Therefore, inventors have been searching for hundreds of years for a way to mechanize (that is, find a mechanism that can perform) this task.



This picture shows what were known as "counting tables" [photo courtesy IBM]

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1 / 11 100% Find

Anniversary Feature



Microprocessor-Based Computers

Nick Tredennick

When Univac delivered its first commercial computer in 1951, it set off a chain of events that continues to unfold. Although the Univac I used vacuum tubes for the switching elements, the transistor—having been invented in 1947—soon displaced the vacuum tube as the basic switching element in digital designs. After the transistor's introduction, computers improved rapidly, becoming smaller, faster, more capable, and more reliable.

The first practical IC was fabricated in 1959 at Fairchild and at Texas Instruments. Its commercial introduction in 1961 by Fairchild further sped improvements in computer implementation. Improvements in semiconductor fabrication made the computer faster, more functional, and cheaper, too, lowering barriers to entry for applications and for manufacturers alike. Mainframe manufacturers were soon joined by a growing number of minicomputer manufacturers, and the computer business was off and running.

Research Process

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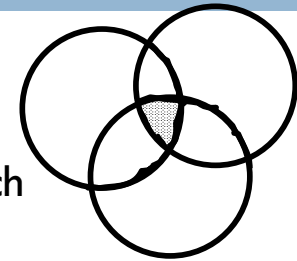
- Define your topic
 - ▣ Brainstorm ideas/concepts
- Develop your search strategy
 - ▣ Select search terms
 - ▣ Select databases
- Search for information
 - ▣ Evaluate what you find
- Write your paper / Create Poster / Report
- Create bibliography

Search Query

17

- Connect the concept sets with "AND"

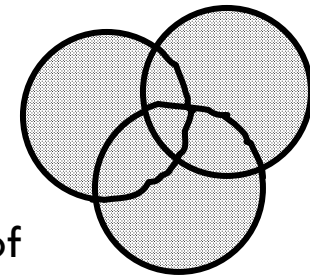
"AND" narrows your search by requiring that at least one term from each concept set be present.



- Connect the synonyms with "OR"

You must use parentheses around your synonyms connected with OR.

"OR" broadens your search by gathering records in which one or more of your terms appear.



- Use the appropriate truncation symbol (* ?) to search for words containing a common word root, with any number or combination of characters following that root.

Where are the books?

18

□ Library Collections

- Circulation (3rd & 4th fl.)
- Puerto Rican Collection (Puertorriqueña –3rd fl.)
- Reference (1st fl.)

□ Online

- CRCNet Base
- Gale Virtual Reference Library

The logo for CRCnetBASE, featuring the text "CRCnetBASE" in a stylized font with a blue and yellow color scheme.The logo for Thomson Gale, featuring the text "THOMSON" above "GALE" with a star symbol between them, all in blue.

Where are the journals?

19

- ❑ Serials and Electronic Resources Collection (1st & 2nd floor)
- ❑ Puerto Rican Collection
- ❑ Online Databases
<http://www.uprm.edu/library/>

Library Databases

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- Provides a quick and organized access to articles published within general and scholarly journals
- Are subscription based (not free)
- The information is trustworthy

How to find a journal article

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- Choose a database (or databases) appropriate for your topic
- Search the database(s) for articles on your topic, using keywords, subjects and/or authors
- Determine if the journal containing your article is available here either in paper or electronically
- Find the article

General Databases

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Examples of general databases:

□ Academic Search Premier



□ Academic Research Library

□ Science Journals



□ General Science Full Text



Specialized Databases




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- Engineering Village  Engineering Village
- IEEE Xplore 
- Science Direct  ScienceDirect
- American Chemical Society 
- MathScinet  MathSciNet
- IHS 

Finding Journal Article

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In most cases you can obtain the article in one of these ways:

- ▣ a link directly to the article within the database
 - ▣ PDF  [PDF Full Text](#) or HTML  [HTML Full Text](#)
- ▣ access to the electronic version of the article 
- ▣ find the print version in Library Catalog
- ▣ try Google...
- ▣ or request a copy via the Interlibrary Loan service

Remote Access

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Decanato de Asuntos Académicos

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Websites

Evaluate, Evaluate, Evaluate...

26

✓ What?

WHAT is the page/site about? Does it have the kind of information you need?

✓ Who?

WHO created the page/site about? Can you find and verify the author's qualifications, whether an individual or organization?

✓ Where?

WHERE is the information coming from?

e.g., .edu=educational, .com=commercial, .org=organization,
.gov=government

Websites

Evaluate, Evaluate, Evaluate...

27

✓ Why?

WHY is this site on the web and how does it affect the information?

✓ When?

WHEN was the page or information created? Is the date important for the timeliness of the content?

✓ How?

How accurate or credible is the page? How would I cite it?

Preventing Plagiarism

28

- ❑ Read, read, read...
- ❑ Take effective notes
- ❑ Make it clear WHO said WHAT
- ❑ Know how to paraphrase (restatement in your own words)
- ❑ Consult with your instructor

References

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A reference is a consistent method of acknowledging another persons ideas, which you may have used, in your own written report, article or dissertation.

- IEEE Editorial Style Manual

http://standards.ieee.org/guides/style/2009_Style_Manual.pdf

- <http://www.zotero.org>

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30

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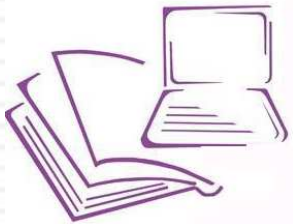
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