

Computing - Information Processing

Media (format-content-genres)

Networked communications



Abacus 500 BC

Automatons in european courts - 1772 "Writer" by Jaquet-Droz



1436, Johannes Guttenberg designs the movable type printing press

1839, at the Palace of the Institute in Paris Louis Daguerre introduces the daguerreotype.



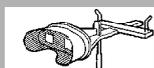
1844, Morse's communication inovation uses electronic impulses, a key and a special code that sequences the impulses to letters of the alphabet

1801 Jacquard loom Weaving with punch cards

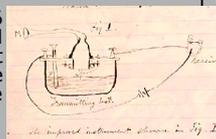


1833 Charles Babbage started the design for a device he called the Analytical Engine.

modern media storage: images, image sequences, sounds and text in different material forms



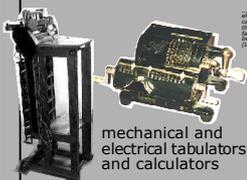
1876 Alexander G Bell obtains a patent for the Telephone



1876 Elisha Gray's Musical Telegraph.



Bell writes, "I then shouted into M [the mouthpiece] the following sentence: 'Mr. Watson--come here--I want to see you.' To my delight he came and declared that he had heard and understood what I said."

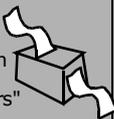


mechanical and electrical tabulators and calculators

1890 USA census used electric tabulating machines designed by Herman Hollerith.

1924 IBM

1936. British mathematician Alan Turing wrote "On Computable Numbers" In it he provided a theoretical description of a general-purpose computer later named the Universal Turing Machine.

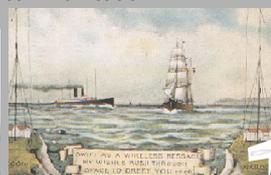


A patent for the Kinetograph (the camera) and the Kinetoscope (the viewer) was filed on August 24, 1891



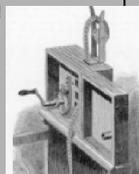
Kinetoscope - exterior view. Electrically-driven peepshow machine for films produced with Kinetograph camera. 1894 (W.K.L. Dickson, Thomas Edison)

1896 (G Marconi, Popov and Tesla) Radio was first used in boats for communication



This was a unique design, resembling a gramophone cabinet on 4 legs with a protruding metal antenna and a metal loop. The instrument was played by moving the hands around the metal loop for volume and around the antenna for pitch.

1895 The Lumière brothers showed their new Cinématographie camera/projection hybrid first to a scientific audience, and, later, in December, to the paying public.

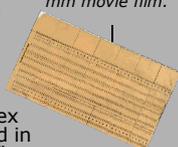


1906 Music and Poetry reading broadcasted through radio (test)

1923 The Television (John Logie Baird)

Theremin 1920, one kind of electronic sound instrument

Punch cards used to store and input software for the first computers



Konrad Zuse builds the first working digital computer. One of his innovations was program control by punched tape. The tape Zuse used was actually discarded 35 mm movie film.



"All existing media are translated into numerical data accessible for the computers. The result: graphics, moving images, sounds, shapes, spaces and text become computable, i.e. simply another set of computer data. In short, media becomes new media." (Lev Manovich, The Language of New Media 2001)

1945. V Bush Memex concept is presented in "As we might think"

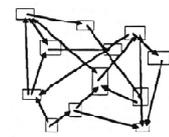


1961 The CHIP entered into commercial production



1964 IBM 360

'ORDINARY' HYPERTEXT



1963. T Nelson and Hypertext



1962 Sensorama

Minimoog synthesizer



1963 Nam June Paik Magnet TV (video-art)



1968 Beyond Modern Sculpture. Jack Burnhard



1968 Demo of NLS, or the "oNLine System" Engelbart and colleagues

1969-1984 Myron Krueger «Videoplace»



1969 First 4 nodes in ARPA network

Host- server

@ 1971. users' log-in name @ host computer name TO: / SUBJECT: /CC: BCC: FWD: (RE)

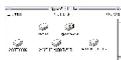


Cellular phone networks, Bank networks, other networks



Aalto at Xerox Parc

CD-ROM Storage and distribution media



Hypercard - Hypermedia authoring tool

Usenet/ lists/ newsgroups Talk (Chatting) IRC

http://www.aplace.co 1991 TB Lee and the WWW

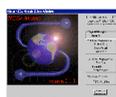


1984 Mac personal computer. first commercial GUI

.MP3. .WAV. .JPG. .TIFF. .MOV. .MPG



SMS, MMS messages



1993. MOSAIC browser