

July 28th

Xia Peisu

or Pei-su Hsia

Born: July 28, 1923;

Chongqing, China

Died: Aug. 27, 2014

Xia was the leading developer of the Model 107, China's first home-grown general-purpose electronic computer, and has been called the mother of computer science in China.

In the fall of 1952, mathematician Hua Luogeng initiated the development of China's first electronic computer, and recruited Xia and two other scientists to lead the project. However, Min Naida and Wang Chuanying left in 1958, so Xia took over, and personally designed the logic unit and controller; the 107 became operational in April 1960.

It was a difficult period since China had relied on Soviet technology until then, and had so far only replicated two Soviet electronic computer designs; the 103 and the 104 based on the Soviet M-3 and BESM-II computers [Nov 2]. However, the Sino-Soviet relationship broke down at the end of the 1950's, after Khrushchev's denouncement of Stalin and Stalinism in Feb. 1956. By 1960 the Soviet Union had withdrawn all of its technical support.

Xia is also credited with designing a high-speed array processor called the 150AP in the 1970s which boosted a computer's speed to 20 operations million per second. She was also responsible for a range of parallel computers.

In March 1956, she taught China's first course in computer theory, and wrote "Principles of the Electronic Computer", the first systematic computer science textbook in China.

Give a Big Hand for Futureworld

July 28, 1976

Futureworld is a 1976 American sci-fi thriller directed by Richard T. Heffron, starring Peter Fonda, with a cameo by Yul Brynner (in his last film). It was released on this day as a rather disappointing sequel to the 1973 Michael Crichton film Westworld [Nov 21]. According to the date on an over-sized novelty check used in the game show scene, the 'future' it refers to begins on June 20, 1985.

Futureworld was the first major film to use 3D computer-generated imagery (CGI), although it only lasts for 30-40 seconds, and isn't central to the story – an animated 3D hand and face are displayed on monitors in Futureworld's control room.



Screenshot from A Computer Animated Hand (1972). (c) The University of Utah.

The hand was a digitized version of Edwin Catmull's [March 31] left hand, taken from his 1972 one-minute experimental short, "A Computer Animated Hand", which he made with his graduate school colleague Fred Park. The digitizing involved making a plaster model, then drawing triangles over the surface with a pen. The corners of the triangles were mapped into coordinates, and entered by hand into a computer.

Catmull's hand is considered the first example of 3D digital rendering, and was added to the Library of Congress' National Film Registry in 2011.

Catmull went on to lead the computer graphics group for

Lucasfilm [Sept 12] which was purchased by Steve Jobs in 1986 and turned into Pixar [Feb 3]

The face which appears at the end of the short is apparently that of Park's wife, but it's less than convincing. Perhaps she refused to have triangles drawn over her face? In any case, it wasn't used in the movie; instead Peter Fonda's head appears as a scanned and animated 3D model. It was created by John Whitney Jr. [April 8] and Gary Demos at "Triple I" [Oct 00].

IBM's First Desktop Computer

July 28, 1981

IBM introduced their System/23 Datamaster desktop computer, two weeks before the IBM PC [Aug 12]. The Datamaster was a heavy (43 kg) all-in-one device with a text-mode CRT display, two 8-inch floppy disk drives, running an 8-bit Intel 8085. It was aimed at the small-business market, for use by non-specialists.

Many of the Datamaster team, including the main lead, Bill Sydnes, were re-assigned to the IBM PC project (the "Dirty Dozen" [Aug 8]). The lessons learnt while developing the Datamaster were used to construct the IBM PC as quickly as possible. For example, the choice of Intel 8088 [July 1] in the IBM PC was based on the team's familiarity with the Intel 8085 in the Datamaster.

The Datamaster's BASIC interpreter was built-in, and problems with it delayed the release of the Datamaster by almost a year. This delay encouraged IBM's selection of Microsoft BASIC [Nov 18] for the PC.

NetHack

July 28, 1987

The first version of NetHack was released by Mike Stephenson as

a single-player dungeon RPG with ASCII graphics. It was a descendant of Hack (1982) by Jay Fenlason and others, which was itself a clone of Rogue [Aug 00].

The game play extended Rogue and Hack by adding many more objects, a larger vocabulary, and puzzles. For instance, as in Rogue, there are traditional fantasy roles such as knight, barbarian, wizard, and monk, and more unusual ones, including archaeologist, tourist, and caveman.

Later versions offered more complex graphics, and ports to a range of platforms, including the Amiga, X Windows [June 19], MS Windows, the Qt toolkit, and GNOME [March 3]. This rapid expansion was helped by NetHack being one of the first games to adopt the open-source GNU General Public License (GPL) [Oct 4].

In 2000, *Salon* magazine described NetHack as “one of the finest gaming experiences the computing world has to offer.”

On December 7, 2015, version 3.6 was released, the first major update in over a decade, but the pace of releases has quickened since then.

The Net July 28, 1995

Columbia Pictures released "The Net", directed by Irwin Winkler and starring Sandra Bullock. In the film, a reclusive, but quirky, computer analyst (Bullock) discovers a conspiracy to install Trojan Horse software on government systems. The conspirators respond by erasing all traces of her identity, and send a cold-blooded assassin after her.

At the start of the movie, Bullock's character is seen playing/debugging the Mac version of Wolfenstein 3D [May 5]. She also has a checklist that mentions 2600 Magazine [Jan 12].

At one point, a Mac virus infects a mainframe, and even more egregiously an IP address, 75.748.86.91, changes in mid-scene to 23.75.345.200.

Verizon Formed July 28, 1998

Bell Atlantic [Jan 1] and GTE announced a merger valued at \$52.88 billion, creating the second largest telephone company in the US after AT&T. After the deal was approved in 2000, Bell Atlantic changed its name to Verizon, a portmanteau of veritas (Latin for “truth”) and horizon.

During the 2000s, Verizon expanded through a number of acquisitions. On November 5, 2005, it bought long distance carrier MCI [Sept 23]. On June 23, 2015, it expanded into media ownership by acquiring AOL [Oct 2] for around \$4.4 billion. On June 13 2017, it snapped up Yahoo! Inc [April 12] for \$4.48 billion. Subsequently, AOL and Yahoo were amalgamated into a new division known as Oath, with more than 1.3 billion digital media users.

As of 2018, Verizon Wireless was the largest wireless telecommunications provider in the US with 150 million subscribers (AT&T was second), and in 2019 the service was split into consumer and business divisions.

Koobface July 28, 2008

Koobface is a network worm that attacked MS Windows, Mac OS X, and Linux platforms, and spread via social networking sites, such as Facebook [Feb 4], Skype [Aug 29], Yahoo! Messenger [April 12], and Twitter [March 21]. The most common infection method was through a fake video player.

It tried to gather login information and financial data, and could also receive commands to install

ransomware, and hijack search queries to display ads.
