June 7th

Frederick Emmons Terman

Born: June 7, 1900;

English, Indiana
Died: Dec. 19, 1982

Terman and William Shockley [Feb 13] are often called the Fathers of Silicon Valley [Jan 11]. From 1925 until 1941, Terman taught a popular electronics course at Stanford, and found time to write the standard text on radio engineering. He actively encouraged his students, including William Hewlett [May 20] and David Packard [Sept 7], to form their own companies, and invested in many of them.

In 1951 he led the creation of the Stanford Industrial Park (now the Stanford *Research* Park) which began leasing portions of the university's land to high-tech firms. Companies such as Hewlett-Packard [Jan 1], Eastman Kodak, General Electric, and Lockheed moved in, and started to change the area into Silicon Valley.

A section of US Route 101 in California near Palo Alto is called the Frederick E. Terman Memorial Highway.

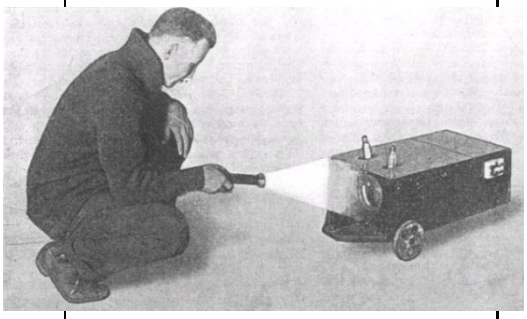
The Electric Dog

June 7, 1912

John Hammond Jr. [April 13] and Benjamin Miessner, two experts in radio-controlled devices, designed the Electric Dog in 1912; making it the ancestor of today's phototropic self-directing robots. A patent application for the contraption's radio-directive controls was filed on this day .

The dog consisted of a small box with two glass 'eyes' containing cells of selenium which changed their electrical resistance when touched by light. This caused an electrical current to start a motor which turned the dog's wheels.

Miessner considered the dog's likely future in "Radiodynamics: The Wireless Control of Torpedoes and Other Mechanisms" (1916): "The electric dog, initially a "scientific curiosity," may within the very near future become in truth a real 'dog of war,' without fear, without heart, without the human element so often susceptible to trickery, with but one purpose: to overtake and slay whatever comes within range of its senses at the will of its master."



Miessner and Electric Dog. *Scientific American* Supplement no. 2267 (1919).

For more electric/robot dogs, see [April 30], [May 11], [Sept 27], [Nov 18].

Donald Watts Davies

Born: June 7, 1924;

Treorchy, Wales
Died: May 28, 2000

Davies was one of the inventors of network packet switching (the other being Paul Baran [April 29]). He also originated the name, winning out over Baran's nomenclature, the much less catchy "distributed message block switching". Packet switching eventually became the underlying technology for the ARPANET [July 29], and the Internet.

It's based on the idea of sending information in multiple, small pieces which are reassembled by the receiver. Packets can be sent to their destination by different routes, with the choice left to the network, not the sender. This allows the network to dynamically adapt to changes in its topology.

Davies implemented a prototype network at the National Physical Lab (NPL [Oct 1]) in the UK, which caught the attention of the ARPANET designers when he presented his work at a conference in Gatlinburg, Tennessee in Oct. 1967.

Priming the Computer

June 7, 1951

For 75 years Edouard Lucas' Mersenne prime [Jan 3] 2^{127}-1 (known as M127) held the record for the largest known value. Jeffrey Miller and David Wheeler [Feb 9] beat this by finding a series of the form k * M127+1 the largest being 934*M127 + 1. In July they added 180 * $M127^2$ + 1, a 79-digit number. Crucially, all of these new entries were discovered by Cambridge's EDSAC [May 6].

Completely new Mersenne primes, followed soon after –the first by Derrick Lehmer [Feb 23] using the Standards Western Automatic Computer (SWAC) on [Jan 30] 1952.

Liam John Neeson

Born: June 7, 1952;

Ballymena, County Antrim, Northern Ireland

Neeson became widely known after playing the title role in Steven Spielberg's 1993 movie, "Schindler's List". He has since starred in many other films, notably the action thriller series "Taken" (2008–)

Before becoming an actor, Neeson began a degree in physics and computer science at Queen's University Belfast in 1971. After a year, he dropped out to work for Guinness Breweries. Nevertheless, he could still claim:

"What I do have are a very particular set of skills; skills I have acquired over a very long career. Skills that make me a nightmare for people like you."

In May 2009, Neeson received an honorary doctorate from Queen's for his contributions to the arts. The actor remarked that he would finally be able to tell his mother that he had graduated.

First Ph.D.

June 7 1965

On this day, Sister Mary Kenneth Keller earned a Ph.D. from the Computer Sciences Department at the University of Wisconsin, while 500 miles away, Irving Che-Hong Tang was awarded a D.Sc. from the Applied Mathematics and Computer Science Department at Washington University in St. Louis.

Sister Mary Kenneth Keller, UW-Madison commencement, 1965 (Wisconsin State Journal)

Earlier Ph.D. students had carried out computer-related research, but Keller and Tang were the first in specific computer science programmes to complete their dissertations.

Keller's thesis was entitled "Inductive Inference on Computer Generated Patterns", while Tang had worked on "Radial Flow Between Parallel Planes".

Keller later joked about being the first Ph.D. in computer science: "Prior to 1965 there were none, and after 1965 there was a nun."

The next individual over the Ph.D. finishing line was probably Richard L. Wexelblat who was awarded his degree on Dec. 5, 1965 from the Graduate Group in Computer and Information Sciences at the University of Pennsylvania.

A possible alternative to Sister Mary is John Henry Holland [Feb 2] who was granted a Ph.D. at the University of Michigan in 1959.

For the first computing degree course, see [Oct 00].

First Mailing Lists

June 7, 1975

Some of the first mailing lists distributed across the ARPANET [July 29] included:

- human-nets: all about human factors and their relationships to networks.
- network-hackers: on Internet programming and protocol issues.
- SF-lovers: focusing on sci-fi literature, and perhaps the very first mailing list.
- wine-tasters.

Google Groups [Feb 12] maintains copies of most of these lists, but only dating back to the early 1980's.

Many believe that Dave Farber [April 17] was responsible for the first network mailing list, MSGGROUP. It ran non-stop until ARPANET was superseded by NSFnet [July 16] in the 1980's, but was only formally decommissioned in 1990. However, according to Katie Hafner and Matthew Lyon in "Where Wizards Stay Up Late" (1998), MSGGROUP was the brainchild of Steve Walker at ARPA's Information Processing Techniques Office (IPTO [March 11]).

These lists inspired Jim Ellis and Tom Truscott to develop USENET ([Jan 29]) in 1979 to provide similar functionality for organizations that weren't connected to the ARPANET, and the ARPANET mailing lists were eventually integrated into the ever-growing USENET via gateways (with names starting with "fa").

Belly Dancing with Chips

June 7-10, 1976

The National Computer Conference and Exposition in NYC included demonstrations of networking, student projects from around the country, and over 900 booths spread over three floors of the New York Coliseum. An estimated 34,000 attended, with perhaps a third of them visiting the MITS booth to look at the Altair 8800b and 68Gb microcomputers [Dec 19].

Data General [April 15] brought along a horse-drawn fairground organ that was parked out in front of the coliseum, and a circus-like exhibit inside – complete with a belly dancer with a 16-bit microNOVA 601 chip stuck in her navel. The 601 remained popular into the mid-1980's, but was eventaually eclipsed by 32-bit designs.

Snipes Released

June 7-10, 1982

Snipes was one of the first text-mode networked multiplayer games, created to demo the capabilities of the new PC-based Novell Netware network [June 30]. The development team consisted of Drew Major (the "Father of NetWare"), Dale Neibauer, Kyle Powell, and later Mark Hurst.

The game's objective was to search and destroy snipes (green boxy monsters) in a maze, along with their bases (called hives). A new maze was

generated for each game, and difficulty settings could add electrified walls, ricocheting bullets, and “ghost” snipes.

Snipes was the first network application for the IBM PC [Aug 12], and was the only one for around a year. It also inspired the more famous NetWars, a 3D space shooter, which was also utilized to demo Netware.

In July 2016, a C++ port of Snipes was uploaded to GitHub [Feb 8], after Major and Powell had given the implementers permission to reverse engineer their code. In Nov. 2017, Snipes debutted on Android [Nov 5].

DB2 Announced

June 7, 1983

IBM introduced DB2 (Database 2) on its MVS mainframes; it would go on to become perhaps the most successful database systems for large businesses.

For some years DB2 was only available on IBM machines, but in the 1990's the company began porting it to other platforms, including OS/2, UNIX, MS Windows, and Linux.

DB2 can trace its roots back to June 1970 when Edgar F. Codd [Aug 19] first proposed his theory of relational databases and data manipulation. In 1974 the IBM San Jose Research center developed a relational DBMS, System R, to implement Codd’s concepts.

One burning question is "Was there a DB '1'?" IBM had a number of research DBMS (such as System R), but the primary aim for the DB2 designers (led by Marilyn Bohl, Don Haderle, and Bob Jackson) was to combine the transaction features of IBM’s Information Management System (IMS [Aug 14]) and its Customer Information Control System (CICS [July 8]), two products with a proven track record of contributing to IBM’s sales. However, elements of System R were used as the basis of DB2's query processing engine.

GeoCities Goes Public

June 7, 1995

GeoCities was a webhosting service that allowed its users to create pages with little or no coding. The end results brimmed with blinking, moving, garishly colored text, animated dancing cats, and the “under construction” guy with his shovel. Each user had a massive (for the time) 15 MB of space to play with, and it was all free, albeit supported by banner ads added to the pages.

GeoCities (Feb 1998).

GeoCities was founded by David Bohnett and John Rezner on Nov. 1 1994 as Beverly Hills Internet (BHI). The site began as a Web directory organized into six 'neighborhoods' – “Colosseum,” “Hollywood,” “RodeoDrive,” “SunsetStrip,” “WallStreet,” and “WestHollywood”. Each user (Homesteader) was assigned a page in one of these neighborhoods.

The concept grew, and when the site went public on this day, there were five “cities” to visit: Beverly Hills, Silicon Valley, Capitol Hill, Tokyo, and Paris. Bohnett said at the time: “This is the next wave of the net – not just information but habitation.”

On Dec. 15 1995, BHI was renamed GeoCities (after a short period as GeoPages), by which time it was hosting 25,000 pages and could boast about six million page views per month.

By 1999 it was the third-most visited Web site, only behind AOL [Oct 2] and Yahoo! [March 2], and was bought by Yahoo! on [May 28], ironically just as people began to change how they accessed the Internet. GeoCities had become popular before broadband was widely available, but eventually faster hardware meant that better community-oriented sites started popping up. The GeoCities model was replaced by social media, such as Friendster [March 22] and Myspace [Aug 1]. Also, people who wanted to publish on the Web began to create blogs [Aug 23].

Yahoo! closed down GeoCities on Oct. 26 2009, but thankfully its contents were archived first.

GeoCities (BHI) wasn’t the first free webhosting service; that was probably Tripod, registered on Sept. 29 1994, and initially aimed at college students.

Murderer Tracked

June 7, 2002

Five days after *The St. Louis Post-Dispatch* ran a story about the police investigation of the murder of ten women over the previous year, it received a letter that included the words 'nice sob story' and a computer-generated map of an intersection in St. Charles County marked with a handwritten X. Detectives subsequently found another victim near that site.

Meanwhile, a comparison of the map with those produced by the main mapping companies led to Expedia.com [Aug 24]. On June 3, Microsoft released records which showed that only one IP address had accessed those grid coordinates in the days before the *Post-Dispatch* letter.

After an investigation of the residence using that address,

enough evidence was found on this day to arrest and convict the occupant.

Bing Oil

June 7, 2010

Comic Stephen Colbert struck a bargain with Microsoft's Bing [June 3] during tonight's “The Colbert Report”.

He explained, "Bing has offered to donate $2,500 to a charity of my choice every time I say the word ‘Bing.’ By the way, Bing is a great website for doing Internet searches. I know that because I Googled it." He continued in this vein for some time, managing to utter “bing” 40 times, and so raise $100,000 for the "Colbert Nation Gulf of America" fund for oil spill cleanup efforts.

Strangely, he never said "Microsoft" during the show.
