Sept. 13th

Herman Heine Goldstine

Born: Sept. 13, 1913;

Chicago, Illinois Died: June 16, 2004

Goldstine helped secure funding from the US Army for the ENIAC [Feb 15], and introduced John von Neumann [Dec 28] to the project. He later worked with von Neumann on the EDVAC [June 30] and IAS [June 10] computers.

His ENIAC involvement ENIAC began because of his mathematicial work in the Ballistic Research Laboratory (BRL) at the Aberdeen Proving Ground in Maryland. In 1943, he visited J. Presper Eckert [April 9] and John Mauchly [Aug 30] at the Moore School after reading their BRL memorandum [April 8] which argued that ballistic calculations could be done thousands of times faster with an electronic computer.

A chance meeting between Goldstein and John von Neumann at the Aberdeen train station in 1944, led to von Neumann becoming interested in the ENIAC project. It was also Goldstein that typed up von Neumann's "First Draft of a Report on the EDVAC" memo in [June 30] 1945. Twenty-four copies was sent to people connected to the project, but somehow it was also widely circulated beyond that group, and so became a source of acrimony between the team memhers

Goldstine and von Neumann are credited with inventing flowcharts for programming while writing another report, "Planning and Coding Problems for an Electronic Computing Instrument" [April 1], although such diagrams had a long history of describing processes, dating back to the 1920s.

Herbert Reuben John Grosch

Born: Sept. 13, 1918;

Canada Died: Jan. 18, 2010

Grosch is perhaps known for Grosch's law (1950) which states that "economy is as the square root of the speed." In other words, the difference in performance between two computers is generally related to the difference in their prices, squared. This means that if you're planning to purchase two small computers, you'd get better overall performance if you bought a single larger machine instead. After all, interconnecting small computers so they can work together is much harder than just using a single device.



Herb Grosch (1951). IBM AC Scan-Image #01070301.tif

In 1945, IBM hired Grosch to do backup calculations for the Manhattan Project [Feb 6], and so (more importantly) became the first employee with facial hair at a time when beards were frowned upon by IBM management. He also claimed to be the only person fired twice by IBM. In between, he worked on Project Whirlwind [April 20] at MIT.

Henry Edward "Ed" Roberts

Born: Sept. 13, 1941; Miami, Florida Died: April 1, 2010

Roberts is often called "the father of the personal computer", due to his development of the first homecomputer kit, the MITS Altair 8800, which was released on [Dec 19] 1974. He also gave Bill Gates [Oct 28] and Paul Allen [Jan 21] their first big break in 1975 by hiring them to write a BASIC interpreter for the Altair [Jan 2]. The relationship between Roberts and Gates was 'stormy' – in a 2001 interview he remembered that Gates was "a very bright kid, but he was a constant headache at MITS."

Roberts, Forrest Mims [Jan 15], Stan Cagle, and Bob Zaller had founded Micro Instrumentation and Telemetry Systems (MITS) back in Dec. 1969. Roberts wanted to call it "Reliance Engineering", but Mims held out for an acronym similar to MIT.

They originally ran the company out of an Albuquerque garage, selling kits to model rocketry hobbyists. Business eventually improved enough so they could relocate to a space formerly occupied by a restaurant called "The Enchanted Sandwich Shop".

In 1971, Roberts moved the company into the calculator market, and the MITS 816 desktop calculator kit was featured on the cover of the Nov. 1971 issue of *Popular Electronics*. Company sales topped \$1 million in 1973.

Roberts sold MITS in 1977, and eventually became a family doctor based in Cochran, Georgia.

Douglas Bruce Lenat

Born: Sept. 13, 1950;

Philadelphia, Pennsylvania Died: Aug. 31, 2023

Lenat is known for his work on symbolic machine learning, as typified by his AM (Automated Mathematician) and Eurisko systems, and more recently for "ontological engineering" with the Cyc Project. Cyc grew out of Lenat's frustrations with encoding domain knowledge for Eurisko. The aim is to codify common sense using an extension to first-order predicate calculus called CycL.



Doug Lenat (2017). Photo by LordRedthorn. CC BY-SA 4.0.

Cyc, which began in 1984, has become one of the largest, continuously running AI research ventures. Lenat once said, "Intelligence is ten million rules."

Super Mario Bros Sept. 13, 1985

Nintendo released "Super Mario Bros" for the NES [Oct 18], as a successor to the 1983 arcade title "Mario Bros". Both were designed by Shigeru Miyamoto [Nov 16] and Takashi Tezuka. Many historians credit this game, and the NES console, as key factors in reviving the game industry after the crash of 1983.

The game follows an Italian plumber called Mario and his brother Luigi as they try to rescue Princess Peach from the evil clutches of Bowser in the Mushroom Kingdom. Mario first appeared in the [July 9] 1981 Nintendo game, "Donkey Kong", as Jumpman, where he was a carpenter. He has since featured in hundreds of games, many TV shows and comics, a less-thanacclaimed live action movie [May 28], and has his own day: [March 10] (aka Mar10).

"Super Mario 64", released in 1996, is largely credited with moving the platforming genre from 2D to 3D.

On July 13, 2021, a sealed "Super Mario 64" cartridge sold for \$1.5 million at Heritage Auctions setting a new world record for the most expensive video game. It knocked "The legend of Zelda" from the top spot which it had occupied for a mere two days [Feb 21]. Zelda had in turn wrestled the record from a sealed copy of "Super Mario Bros." sold by Heritage for \$660,000 in April.

EISA by the Gang of Nine Sept. 13, 1988

The Extended Industry Standard Architecture (EISA, pronounced "eee-suh") was a bus standard for IBM PC compatibles, which was announced on this day by a consortium of vendors (the socalled "Gang of Nine"). Their aim was to counter IBM's proprietary Micro Channel architecture (MCA) which had been introduced the previous year with the PS/2 [April 2].

EISA extended IBM's AT bus from 16 bits to 32, and allowed more than one CPU to share the line. While they were at it, they renamed the AT bus [March 2] the ISA (Industry Standard Architecture) bus to avoid infringing on IBM's trademark.

The Gang of Nine were: AST Research, Compaq, Epson, Hewlett-Packard, NEC, Olivetti, Tandy, WYSE, and Zenith Data Systems. Compaq was generally acknowledged as "first among equals', and it was also noted that the first letter of each company's name formed the acronym WATCHZONE (and WAZ TECHNO).

Subsequent, faster buses included the Video Electronics Standards Association (VESA) local bus, and PCI [June 22] released in 1993.

World Of Warcraft Corrupted Blood Sept. 13, 2005

A pandemic broke out in World of Warcraft (WoW) [Nov 23] after the introduction of Hakkar the Soulflayer due to his highly contagious "Corrupted Blood" spell. It was intended to last just a few seconds and work only within Hakkar's kingdom. Unfortunately, the WoW programmers had forgotten that pets and minions could also be infected, and the plague soon spread across the whole virtual world.

Enforced quarantines, and the mass abandonment of cities couldn't stop the pandemic. Only the drastic combination of software patches and world resets finally controlled its spread.

The "Corrupted Blood" plague wasn't the first virtual disease to break out in a game world. In May 2000, many game characters had died in "The Sims" [Feb 4] because of an infection contracted from a dirty guinea pig.

In March 2007, Ran Balicer, an epidemiologist physician, published an article suggesting that multiplayer games of the WoW type could be used to model the dissemination of infectious diseases.

For more digital disease, see [Nov 19].

1.6 Billion Seconds

Sept. 13, 2020

At 12:26:40 UTC (or GMT) on this day, UNIX time [Jan 1] will reach 1,600,000,000 seconds. A suitably sinister countdown clock is located at: https://www.epochconverter .com/countdown

UNIX time had reached 1.5 billion seconds at 2:40am UTC on Friday, July 14, 2017.

For numerous other date/time related events, see [Jan 1].

Day of the Programmer Every Sept. 13

Today's "Day of the Programmer" marks the 256th day of the year, except in leap years when it falls on Sept. 12. Of course, 256 is 2⁸, the number of values that can be stored in an 8-bit byte.

Celebration of this day was first proposed by Valentin Balt and Michael Cherviakov in 2002, and they went on to gather signatures to petition the Russian government to make it an official holiday. Dmitry Medvedev (President at the time) signed the decree into law on Sept. 11, 2009.