

August 18th

Klára (Klári) Dán von Neumann

Born: Aug. 18, 1911;

Budapest, Hungary

Died: 10 November 1963

Von Neumann was one of the three primary programmers of the ENIAC [Feb 15] after it was moved to the Ballistic Research Lab (BRL) on [July 29] 1947. Her duties included managing ENIAC's upgrade to a stored-program machine, training other programmers, and involvement in the ENIAC weather forecasting project [Nov 1].

Later she worked on the MANIAC [March 15] built by Nicholas Metropolis [June 11] at the Los Alamos Scientific Lab.

Klára became the Hungarian national figure-skating champion at age fourteen, before being sent to boarding school in England. She married John von Neumann [Dec 28] in 1938, before emigrating to the US.

The Transistron

Aug. 18, 1948

The transistron point-contact transistor was developed by two German physicists, Herbert F. Mataré (1912 - 2011) and Heinrich Welker (1912 - 1981), at a Westinghouse research lab in Paris. It was conceived of quite independently of the similar work by John Bardeen [May 23], Walter Brattain [Feb 10], and William Shockley [Feb 13] at Bell Labs.

The Westinghouse team obtained their first results just a few months after the Bell Labs' success on [Dec 16] 1947, but only became aware of it after the transistor's public demo on [June 30] 1948.

Westinghouse responded by rushing to get the transistron into production, and a patent

application was submitted on this day (which was granted on June 11, 1952).

By mid-1949, thousands of transistrons were being manufactured for use as amplifiers in the French telephone system. However, point-contact devices were soon superseded by the junction transistor [June 23].

XCON/R1

Aug. 18-21, 1980

John McDermott presented his paper "R1: An Expert in the Computer Systems Domain" at the AAAI-80 conference. It would become one of the most cited articles on expert systems.

XCON/R1 helped during the ordering of DEC's VAX systems, by automatically selecting system components based on customer requirements; XCON was short for "eXpert CONFIGurer".

It was first used at DEC's plant in Salem in 1980, and by 1986 had processed some 80,000 orders with 95-98% accuracy. It was estimated to be saving DEC \$25 million/year by reducing selection errors, speeding up the assembly process, and by increasing customer satisfaction.

The system was written in OPS5, a rule-based language, employing about 2500 rules. Two previous versions had been unsuccessfully coded in FORTRAN and BASIC.

Apparently the R1 part of the name came from McDermott's joke that "Three years ago I couldn't spell knowledge engineer, now I are one."

For more expert systems, see [Jan 20] and [Nov 8].

Pigeon-based Communication

Aug. 18, 1982

On this day, it was reported that Lockheed, the space and

computer technology company, was using carrier pigeons to transport data to the company's Felton lab, 100 miles south of San Francisco. The pigeons carried microfilmed graphic design diagrams over the mountains from the Sunnyvale office to Felton.



Carrier pigeon (stuffed). Photo by Morio. CC BY-SA 3.0.

The company did have a machine that would transmit designs from the Sunnyvale computer to Felton over a phone line, but it was only used as a backup. Werner Deeg, the "pigeon system" administrator explained, "It costs \$10 a print to use the machine but the pigeons cost \$1. With eight people using it for 30 to 50 prints a day, that amounts to a goodly sum of money at the end of the year. 'Pigeons just need a little love, care, feed and water, about \$100 a year.'"

The distance from Sunnyvale to the Felton pigeon loft was about 30 mile, with an average flying time of around 40 minutes for the pigeons.

Good ideas like this one are regularly rediscovered. For example, see the "IP over Avian Carriers" RFC proposal [April 1].

Robot Arrested

Aug. 18, 1982

The Beverly Hills Police Department arrested a radio-controlled DC-2 robot for illegally distributing business cards, and causing a disturbance on North Beverly Drive.

The DC-2 was a wheeled machine manufactured by Android Amusement Corp,

consisting of a monitor and keyboard, a camera, a speaker, and assorted flashing lights. The computer element was a Commodore VIC-20 [May 00], which managed the robot's pre-determined 'dance' moves' and head rotations. DC was short for "Drink Caddy", since it included a fold-down drinks tray.

When the police at the scene called out for the operator to step forward, nobody appeared. Instead, the robot shouted out "Help me! They're trying to take me apart!"

It turns out that the device was being controlled by the two teenage sons of Gene Beley who owned the Android company. The police considered citing Beley for failing to obtain a permit for advertising on the sidewalk, but no charges were filed, and the robot was returned. "He's just glad to be home," Beley told the news media later.

The Sept. 1984 issue of *National Geographic World* featured a DC-2 on its cover, although rebadged as the OPD2, OPD standing for "Orlando Police Department".

Atari's E.T. Aug. 18, 1982

Atari [June 27] announced that it has obtained exclusive rights to market video games based on the movie "E.T. the Extra-Terrestrial" directed by Steven Spielberg (1982). The resulting game is often cited as a major factor contributing to the video game industry crash [Dec 7] of 1983.

The E.T. game was released in Dec. 1982 for the Atari 2600 [Oct 14]. The player had to help E.T. collect three pieces of an interplanetary telephone that would allow him to phone home.

Since licensing negotiations only ended in late July 1982, the designer, and sole programmer, Howard Scott Warshaw, had a mere five and a half weeks to develop the game in time for a Christmas release. Usually,

games of this type took six to eight months to finish.

Warshaw, then 24, had been hand-picked by Spielberg who had liked his work on the earlier "Yars' Revenge" and "Raiders of the Lost Ark" games, both massive hits

The time constraints meant that Warshaw's only option was to create a small, simple, game. The player would guide E.T. through a landscape filled with pits, and collect pieces of a phone while evading FBI agents.

Contrary to later legend, the game sold quite well, and was among the top four on *Billboard magazine's* "Top 15 Video Games" sales list in Dec. 1982 and Jan. 1983. It eventually sold 1.5 million units, becoming one of the best-selling Atari 2600 titles.

But when kids actually started playing the game, things quickly turned sour. One specific complaint centered around the pits, which players couldn't seem to avoid falling into.

Initially priced at \$38, the game was soon on sale for \$7.99. Eventually, between 2.5 and 3.5 million cartridges went unsold, and in the second quarter of 1983, Atari's parent company announced losses of some \$310 million.



E.T. and Centipede uncovered during the excavation. Photo by taylorhatmaker. CC BY 2.0.

Warshaw has said: "It's awesome to be credited with single-handedly bringing down a

billion-dollar industry with 8 KB of code. But the truth is a little more complex."

A well-known story is that the millions of unsold cartridges were buried in an Alamogordo, New Mexico landfill. On April 26, 2014, an archeological dig was undertaken to determine the story's accuracy, and many E.T. cartridges, and other titles, were unearthed. James Heller, a former Atari manager who was in charge of the original burial, revealed that 728,000 cartridges for various titles were in the landfill.

At auction, some of the unearthed E.T. cartridges, which has developed a cult following in recent years, fetched as much as \$1,500.

QuickBASIC Aug. 18, 1985

Microsoft released QuickBASIC (aka QB) for MS-DOS [Aug 12]. It replaced GW-BASIC [Aug 1], which had been the reigning BASIC for DOS for the previous few years. GW-BASIC was a port of Microsoft's BASIC-80 (aka MBASIC) [Nov 18].

QuickBASIC added user-defined types, better graphics and disk support, and a compiler. It soon became a popular teaching language because of its simplicity, features, speed, support tools, and documentation.

Microsoft released several updates until late 1988. QuickBASIC 4.5 was then replaced by Visual Basic [June 3], although development of the language continued until version 7.1.

Thumbs up to Mortal Kombat Aug. 18, 1995

New Line Cinema released the fantasy film "Mortal Kombat", directed by Paul W.S. Anderson and starring Christopher

Lambert; it was based on the video game of the same name [Oct 8].

The story centers on three martial arts masters who are summoned to a mysterious island to compete in a tournament whose outcome will decide the fate of the world.

The film was surprisingly well received by critics, most notably receiving a thumbs up from critic Gene Siskel. It was later considered to be the first successful video game movie, after flops such as "Super Mario Bros" ([May 28] 1993)

The video game was originally intended to feature Jean-Claude Van Damme [Aug 30], but he declined. He also declined a role in this movie.

Anderson went on to direct the movie version of "Resident Evil" [March 22].

SoBig.F

Aug. 18, 2003

The Sobig.F worm was first detected on this day, the "F" indicating that it was the fifth variant of the original "Sobig" which had popped up in January.

This version went on to set records for the speed at which it spread, by sending out phony e-mails. It was also programmed to contact 20 IP addresses on Aug. 26, 2003 to download something to its hosts. It's unclear what this was, but earlier versions had installed proxy server software to act as a backdoor for spammers to distribute even more e-mail.
