

June 19th

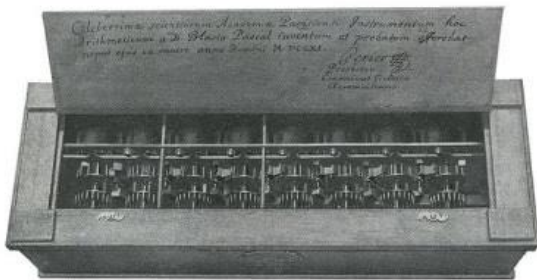
Blaise Pascal

Born: June 19, 1623;

Clermont-Ferrand, France
Died: Aug. 19, 1662

In 1642, in an effort to ease his father's tax-collecting duties, Pascal constructed a calculator capable of addition and subtraction. The "Pascaline," used notched wheels, with each mark representing a digit, and each wheel denoting a unit (tens, hundreds, thousands, etc.).

The calculator proved to be both cumbersome and expensive, but it found a niche as a toy for the very rich.



A Pascaline calculator. From the Musée des Arts et Métiers.

Although Pascal has been called the inventor of the mechanical calculator, Wilhelm Schickard [April 22] developed a machine some twenty years earlier, at least to the design stage.

Wallace John Eckert

Born: June 19, 1902;

Pittsburgh, Pennsylvania
Died: Aug. 24, 1971

After hearing about L.J. Comrie's [Aug 15] creation of astronomical tables with tabulating machines, Eckert was inspired to perform his own celestial calculations. He had his eye on IBM's new 601 Multiplying Punch (1931) augmented with extra

capabilities to solve differential equations. The machine, dubbed the Astronomical Calculator, was delivered to the attic of Pupin Hall at Columbia in 1933, as a gift from Thomas J. Watson [Feb 17], making it the first lab to utilize punched cards for scientific work.

In 1934 Eckert designed and installed a "calculation control switch" which made it easier to run long calculations without manually moving the card decks back and forth between the calculator, tabulator, and sorter. This greatly enhanced the programmable aspect of the calculations.

Just after the war finished, Watson had a major falling out with Howard Aiken [Aug 7] over the Harvard Mark 1, and this led to IBM refocusing their funding on Columbia. Eckert's lab was renamed the Watson Scientific Computing Lab [Feb 6], and Eckert was put in charge of the Selective Sequence Electronic Calculator (SSEC [Jan 27]) project, Watson's response to the Mark I.

It is perhaps worth noting that Wallace Eckert was unrelated to the ENIAC'S J. Presper Eckert [April 9].

Raymond John Noorda

Born: June 19, 1954;

Ogden, Utah
Died: Oct. 9, 2006

Noorda was the CEO of Novell from Jan. 1983 until 1994, ending "The Time of Six Presidents" so named because after the departure of Jack Davis in Dec. 1981 to the arrival of Noorda, Novell went through at least six CEOs. The exact number is uncertain, but the company shrank from 120 employees down to just 15.

Noorda set about reorganizing Novell around support for LANs, and formed the SuperSet team whose members included Drew

Major, Dale Niebaour and Kyle Powell. They developed Netware [June 30] which became the de facto standard for networking software until the mid-1990's.

Novell also wanted to challenge Microsoft in the OS and applications markets, and acquired several companies to further that goal, including Digital Research [Feb 28], Unix System Lab [June 14], WordPerfect [Nov 26], and Borland's Quattro Pro [Jan 16].

Although the challenge ultimately failed, Bill Gates [Oct 28] claimed that Noorda had a "tremendous vendetta" against Microsoft, and had supported the FTC's antitrust investigations of Microsoft [May 18].

Following his retirement from Novell in 1994, Noorda established the Canopy Group. One of its holdings, Caldera Systems, acquired the assets of Digital Research (including DR-DOS [April 17]) in 1996, and then brought a lawsuit against Microsoft that largely duplicated the FTC claims [Jan 10].

Talos and the Argonauts June 19, 1663

"The Argonautica" is a Greek epic poem written by Apollonius Rhodius in the 3rd century BC which tells the story of Jason and the Argonauts' voyage to retrieve the Golden Fleece.

In book 4, their boat, the Argo, tries to approach Crete which was protected by a giant humanoid automaton made of bronze called Talos. He kept the Argo from landing by hurling boulders at it.

The sorceress Medea, who was on board the Argo, hypnotized Talos, driving him mad with visions of the Keres (female ghosts). During his rantings, he dislodged a nail in his ankle, and "the ichor ran out of him like molten lead", killing him.



The Talos model by Ray Harryhausen at the National Media Museum, Bradford. Photo by Chemical Engineer. CC BY-SA 4.0.

Probably most of us know this story from the movie, "Jason and the Argonauts," which was released on this day. It was directed by Don Chaffey, starred Todd Armstrong, but is remembered primarily for its amazing stop-motion effects by Ray Harryhausen.

Talos makes a stunning appearance as a giant statue guarding the Isle of Bronze, and is killed by Jason pulling a large plug from his heel to release the ichor.

Talos was far from being the first automaton. Homer's Iliad, dating from around the 8th century BC, recounts how Hephaestus, the Blacksmith of the Gods, fashioned mechanical helpers out of gold to assist him in his work. They took the form of young women.

The US Special Operations Command proposed their own TALOS (Tactical Assault Light Operator Suit) in 2015, a robotic exoskeleton. It was not powered by ichor.

For modern day automata, consider "The Steam Man"

[March 24] or "Tik-Tok" [July 30].

Camp Retupmoc June 19-24, 1977

Camp Retupmoc ('computer' spelled backwards) commenced in Terre Haute, Indiana, making it the first to offer a week-long residential computer programming course for high school students. The advert in June's *BYTE* magazine stated:

"The program is for boys about to enter their junior or senior years in high school; it consists of lectures on BASIC programming, films on computing, and talks by computer scientists in business and industry who are making novel applications of the computer."

It was organized by John Kinney at the Rose-Hulman Institute of Technology, and probably utilized a PDP 11/70 [Jan 5] and VAX 11/780 [Oct 25].

X Windows June 19, 1984

The X Window System (aka X11) for UNIX-like OSes provides the usual GUI features but runs over the network while hiding the ensuing complications of window manipulation.

Jim Gettys and Bob Scheifler began working on X in 1984 as part of MIT's Project Athena, and Scheifler first posted news about the project on this day. X derived its name from an earlier window system called W, which had run under the V OS.

X has stayed at version 11 since Sept. 1987, although there have been a few numbered sub-releases (currently at X11R7.7 dating from June 2012). There's also variants that run on MS Windows (e.g. VcXsrv), macOS, and some implemented in Java.

"The Unix-Haters Handbook" (1994), a semi-humorous look at the frustrations of using UNIX, devoted a full chapter to

problems with X. Henry Spencer [?? 1955] once wrote, "Programming graphics in X is like finding the square root of pi using Roman numerals."

Digital Cinema June 19, 1999

Digital cinema debuted in four US theatres, two on the East coast and two out West, unfortunately with the less than stellar, "Star Wars: Episode 1 – The Phantom Menace" [May 4].

In 2002, "Star Wars: Episode II- Attack of the Clones" became the first major picture to be shot entirely on digital video, with the producers estimating that they'd spent \$16,000 on 220 hours of digital tape. However, if they'd used the same amount of film stock, it would have cost \$1.8 million. Three hits against it were the movie's use of content encryption, and the necessity of seeing and hearing Galactic Senator Jar Jar Binks.

Lukee's Lucky June 19, 2001

Los Angeles Animal Control workers discovered a radio frequency ID (RFID) chip implanted in a dog just moments before it was to be put down. The chip enabled them to locate the owner, Shauna Lukesh, who lived 50 miles east of LA. The seven-year-old Lhasa Apso, named Lukee, had gone missing on July 4, 1997, four years before.

Harry Stockman is often credited with the invention of RFID due to his landmark 1948 paper, "Communication by Means of Reflected Power", although Mario Cardullo's patent dated Jan. 23, 1973 describes a passive radio transponder with memory, and so is more recognizably a RFID device.

For more RFIDs, see [Aug 9; Sept 21; Oct 25].

Gaak Escapes

June 19, 2002

Gaak the Robot made a bid for freedom by escaping from the Magna science center in Rotherham, South Yorkshire, where it was taking part in a deadly "survival of the fittest" test. Gaak (a Klingon name [Sept 8]) had been instructed to sink its metal fangs into smaller but more nimble robots, to "eat" their electric power.

Left unattended, the 2-foot tall machine found a gap in a fence, squeezed through, and reached the science center's exit onto the M1 motorway. Unfortunately, shade from trees fooled it into steering in circles. It was discovered and switched off.

Minority Report

Released

June 19, 2002

"Minority Report" is a sci-fi film directed by Steven Spielberg [June 9; June 29], starring Tom Cruise, and loosely based on the short story by Philip K. Dick [June 25; Nov 18].

In the year 2054, "PreCrime" police can arrest criminals based on knowledge about their futures provided by three psychic "precogs".

In 1999, Spielberg recruited a team of sixteen futurists for a three-day "think tank summit" in Santa Monica to brainstorm the year 2054. The team included: Neil Gershenfeld, creator of the Fab Lab at MIT; Jaron Lanier [May 3]; Stewart Brand [Dec 14]; and Kevin Kelly, founder of *Wired* magazine [Jan 2].

Spielberg later described his ideas: "The Internet is watching us now. If they want to, they can see what sites you visit. In the future, television will be watching us, and customizing itself to what it knows about us. The thrilling thing is, that will make us feel we're part of the medium. The scary thing is, we'll lose our right to privacy. An ad

will appear in the air around us, talking directly to us."

Zynga's FarmVille

June 19, 2009

Zynga Inc. was one of the pioneer of social gaming. Its first release, "Texas Hold'Em Poker" (now known as "Zynga Poker"), was uploaded to Facebook [May 18] in July 2007, but the company hit the big-time when it launched FarmVille on this day, attracting some 10 million daily users in just six weeks.

FarmVille's gameplay takes us to the exciting world of farm management, including plowing, planting, harvesting, and raising livestock., and TV host Martha Stewart has criticized it for encouraging people to waste their time on virtual farming instead of actual gardening.

Over the years, Zynga has been accused several times of copying concepts from other games, and perhaps learnt an important lesson from the brouhaha. In Jan. 2011, it sent a cease and desist notice to the Blingville company, alleging trademark infringement for its use of the letters "ville".

Zynga was named after co-founder Mark Pincus' late bulldog, and the company uses a silhouette of a bulldog as its logo. In 2011, Zynga opened new headquarters in San Francisco's South of Market district, which was soon nicknamed "The Dog House."

First Wordle Word

June 19, 2021

Wordle is a web-based word game created and developed by Welsh software engineer Josh Wardle. The goal is to find a random five-letter word in six tries. You do that by guessing each time what the missing word might be. After each guess, the color of the tiles change to show how close your guess is to the word. Part of the appeal of Wordle, and what differentiates it from other word games, is that

only one word is available each day.

The mechanics are similar to the 1955 pen-and-paper game Jotto invented by Morton M.

Rosenfeld, and the television game show Lingo. However, Wardle has said that he was mostly influenced by the color-matching game Mastermind when he wrote the first prototype in 2013.

Mastermind is based on a paper based game called "Bulls and Cows". A computer version is known to have run on Cambridge University's Titan system [Feb 9] in the 1960's, where it was called MOO and was coded by Frank King. There was also a version on Multics [Nov 30] by Jerrold Grochow.

Wordle is also similar to WORD a game published in "101 Computer Games" by DEC in 1973 and later in Creative Computing's bestseller "BASIC Computer Games" [May 17]. That game was written by Charles Reid while a student at Lexington High School.

When the COVID-19 pandemic struck, Wardle returned to his prototype, and by Jan. 2021, Wordle was on the web, but mostly just for himself and his partner. He named it Wordle as a pun on his surname.

On this day, the website became openly available, eventually leading to its viral spread. Over 300,000 people played Wordle on Jan. 2, 2022, rising to over 2 million a week later. Between Jan. 1 and 13, 1.2 million Wordle results were shared on Twitter [March 21].