Feb. 4th

Lotfi Aliasker Zadeh

Born: Feb. 4, 1921;

Baku, Azerbaijan
Died: Sept. 6, 2017

Zadeh proposed using fuzzy sets to manipulate concepts with ambiguous boundaries, and it soon found favor in diverse fields such as pattern recognition and database systems. The led to related ideas such as fuzzy numbers, fuzzy arithmetic, and fuzzy logic.

Not everyone liked the theory: the mathematician William Kahan dismissed it as "the cocaine of science," but it proved useful, and Zadeh's first paper from 1965 accumulated nearly 100,000 citations.

Zadeh described himself like so: "Obstinacy and tenacity. Not being afraid to get embroiled in controversy. That's very much a Turkish tradition. That's part of my character, too. I can be very stubborn. That's probably been beneficial for the development of fuzzy logic."

Zadeh was a fine dancer and a skilled tennis player.

Mary Clare Coombs (née Blood)

Born: Feb. 4, 1929;

Muswell Hill, London, UK
Died: Feb. 8, 2022

Coombs is recognized as the first female commercial programmer, who began working on Lyons' LEO computer in 1952 [Sept 5].

After graduating from Queen Mary College, London, her plan was to teach French. Unfortunately, no suitable jobs came up, so her father, who was the medical officer at Lyons, suggested she take a trainee job at its main office in Hammersmith.

While working in the statistics department, she saw a memo inviting staff to enroll in a "computer appreciation" course. Intrigued, she signed up and was later asked to join the LEO team. Soon, she was involved in creating a program to process the payroll for 10,000 Lyons staff. The results were astonishing: calculating each employee's pay had taken a clerk about eight minutes; LEO could do it in 1.5 seconds.

She later remembered, "When it was LEO 1, you had to know a lot about the machine itself, because there was so little storage space that every instruction had to be essential, or it had to be knocked out."

As Lyons' computing expanded, Coombs worked on programs for its external clients too – from Ford Motors to the Inland Revenue and the Army. It was "wildly exciting", she recalled. "It was really great fun."

Kenneth Lane Thompson

Born: Feb. 4, 1943;

New Orleans, Louisiana

At Bell Labs [Jan 1], Thompson developed the UNIX operating system with Dennis Ritchie [Sept 9]. UNIX inspired BSD [March 9], Xenix [Aug 25], AIX, POSIX [?? 1988], Solaris [Sept 4], Linux [Oct 26], Android [Nov 5], A/UX [Feb 8], NeXTSTEP [Oct 12], MacOS [March 24], and many, many others.

Ken Thompson (1973). Photo from the Jargon File.

Brian Kernighan [Jan 1] characterized the collaboration between Thompson and Ritchie as: "UNIX is Ken Thompson with an assist from Dennis Ritchie [Sept 9]. And C is Dennis with an assist from Ken." They presented their first paper on UNIX on [Oct 15] 1973.

Thompson and Ritchie were members of the Bell Labs Computing Sciences Research Center at Murray Hill. During the 1960's, the center was a member of the Multics project [Nov 30], but Bell pulled out of the collaboration in April 1969. Nevertheless, Thompson wanted to continue doing OS research, but also wanted to avoid Multics' "big system mentality."

He originally implemented the first components of UNIX as tools to help him port his "Space Travel" game over to a PDP-7 [Dec 00]. The game simulated the motion of planets and moons, with the player cruising through space and landing on the planets. Thompson wrote three key tools: an assembler, an editor (called ed [Aug 1969]), and a shell, in a single month, August 1969, while his family was away visiting relatives.

After the project moved to a PDP-11 [Jan 5], Thompson, Ritchie, Doug McIlroy [April 3], and Rudd Canaday added a hierarchical file system (an idea borrowed from Multics), processes, pipes [Oct 11], device files, and numerous text utilities [Nov 6].

Thompson wrote the first two or three versions of UNIX in assembly, but rewrote it (mostly) in C in 1972 to make it more portable. This became UNIX version 4, and version 6 became the first to be widely distributed to universities. By that time, the OS consisted of about 9,000 lines of C and 700 lines of assembly for machine-specific operations like setting up registers, devices, and memory mapping.

UNIX wasn't the first OS written in a high-level language. The system software for the Burroughs B5000 [Feb 18], the MCP (Master Control Program),

was written in an variety of ALGOL 60 [Jan 11] called ESPOL.

The home of UNIX during the 1970's was the sixth floor of Building 2 at Bell Labs, in room 2C-644 to be exact. According to Brian Kernighan: "The sixth floor was basically a service corridor: dingy, dimly lit and lined with storage areas holding dusty abandoned equipment in locked wire cages. … There were a handful of enclosed spaces, one of which was the UNIX room."

Thompson's work day typically began late – he'd arrive a minute or two before the lunch room closed at 1:15 pm, and then would work until 3 or 4 am. His preferred programming environment was a Teletype terminal [April 00] with no screen.

Thompson's other contributions included the B language, the predecessor to Ritchie's C, the first implementation of regular expressions [Jan 5], the Belle chess computer built by Joe Condon and programmed by Thompson [Sept 25]. His interest in chess is reflected in his login password from the late 1970's [Oct 9].

He was one of the creators of the Plan 9 OS [July 16], defined UTF-8 [Sept 2] with Rob Pike [Nov 10], and co-invented the Go language at Google [Nov 10].

For many years, the bottom drawer of his filing cabinet contained an Enigma machine [Feb 23], which he'd inherited from Fred Grampp, a Bell Labs colleague. How Grampp obtained the machine is shrouded in mystery.

Thompson was an avid pilot, and persuaded several other members of the UNIX group to become aviators. When he was 48, he paid $12,000 to fly a MiG-29 fighter jet in Russia, where he performed a variety of rolls, loops, and inverted stalls. He described it as "equal parts G-force and adrenaline".

Some quotes: "One of my most productive days was throwing away 1000 lines of code."

"You can't trust code that you did not totally create yourself." (This comes from his 1983 Turing Award acceptance speech [June 23] concerning a backdoor that he added to a C compiler used at Bell Labs.)

Computer War Gaming

Feb. 4, 1952

The first computer-simulated war game, "Project Simulator," was conducted by John L. Kennedy, a psychologist at the RAND Corporation [Oct 1], working with the Air Defense Command.

It involved the building of a mock-up of the Tacoma radar station in the back of a Santa Monica billiard room (other sources say it was a warehouse on 4th and Broadway). The aim was to study how individuals interacted when supplied with simulated aircraft tracks as they might appear on radar scopes.

The experiment, known as "Casey," ran from Feb. 4 to June 8, 1952, and consisted of 54 four-hour sessions. Twenty-eight UCLA students were recruited as test subjects.

Allen Newell [March 19] programmed RAND's IBM 604 to calculate sample aircraft tracks and print their positions (as 1's and 8's) onto a series of sheets printed by an IBM 407. A new page was generated every 30 seconds corresponding to the rate at which a radar screen changed.

The results persuaded the Air Force to deploy the system, and fund a variety of improvements, including a high resolution camera and a CRT display so a film strip could replace the paper printouts.

When the research team was studying the results of "Casey" in the summer of 1952, they brought in Herbert Simon [June 15] as an expert on organization theory. Newell and Simon would later work together on some of the earliest AI systems.

IBM Dresses Down its Staff

Feb. 4, 1995

Louis Gerstner, Jr. [March 1], then chairman of IBM [Feb 14], announced that the company would relax its formal dress requirements for staff.

IBMers traditionally wore pin-striped dark suits, well-starched white button-down shirts, seriously-minded ties, a fedora (mandatory until the 1960's), and polished wing-tipped shoes (and hence the nickname for the IBM sales force: "wingtip warriors"). However, there was never an official dress code, and the practice had just sprung up naturally under the leaderships of Thomas J. Watson Sr. [Feb 17] and Jr. [Jan 14].

IBM 7090 [Nov 30] and personnel (1961). Photo by NASA Ames Resarch Center.

On the first day back at work after the pronouncement, Gerstner wore a daring blue suit and shirt combination. However, IBM watchers had already predicted these seismic shifts when Gerstner had taken over two years before, and was seen wearing a striped shirt.

John T. Molloy, author of the business fashion bible "Dress for Success," was against the change. He said, "Part of the perception that gave them an edge was that corporate dress code. It said, 'We are a step above. We are different. We are not like the other guys.' What

IBM has done is a colossal blunder."

Bill Gates Creampied

Feb. 4, 1998

Bill Gates [Oct 28] was creampied (hit in the face by a pie filled with cream) by Belgian Noël Godin. At the time, Gates was nonchalantly entering a European Union building in Brussels to give a speech about education.

The prankster escaped, but an accomplice and cameraman were taken into custody. Godin later appeared on television to take full responsibility for the grievous attack. Gates, who at the time was more worried about software piracy [Feb 3] than soft pies, did not press charges.

Godin's exploits have become so renowned in the French-speaking world that a word has been coined to describe the act of being creampied: "entarter". Godin himself is called "L'entarteur," or "the Pieman" . His other targets have included filmmaker Jean-Luc Godard and Brigitte Bardot, the French film star turned animal rights activist. Godard noted that "this is what happens when silent movies meet talking pictures".

A computer game was later released in which Gates' head pops up around the screen and the objective is to creampie him as many times as possible in an allocated time [Aug 12].

The Sims Released

Feb. 4, 2000

"The Sims" is a life simulation game, developed by a team at Maxis led by Will Wright [Jan 20], and published by Electronic Arts (EA). It's an open-ended game in the same style as Wright's earlier mega-hit "Sim City" [Feb 2].

A player can create a home, get a job, and form relationships. Customizable characters called Sims have personality types that are a mix of Sloppy/Neat, Shy/Outgoing, Lazy/Active, Mean/Nice, and Serious/Playful. They also speak an artificial language called Simlish.

"The Sims" was exceptionally popular with women, who accounted for more than 60% of the players, and the game ended up selling over 16 million units during its lifetime, 100 times EA's projections.

Wright was inspired after losing his home during the Oakland-Berkeley firestorm of 1991. He also took ideas from the classic 1977 architecture and urban design book "A Pattern Language" by Christopher Alexander, Sara Ishikawa and Murray Silverstein, and from Charles Hampden-Turner's "Maps of the Mind". The Alexander book was also an influence on the development of programming design patterns [Oct 21].

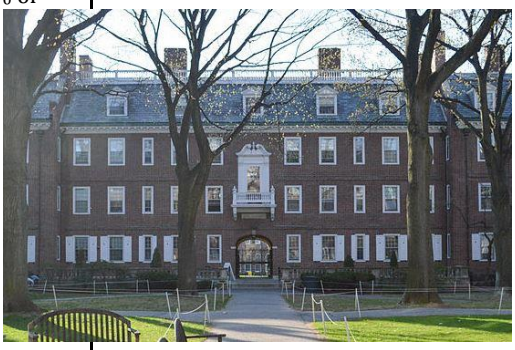
Maxis and EA continued the franchise by releasing expansion packs, enabling the game characters to do things not possible in the original title. Livin' Large was the first, and put the Sims into some odd situations, including cockroach infestations and alien abductions. It introduced beloved characters such as "Sunny The Tragic Clown" and "The Grim Reaper".

Facebook Born

Feb. 4, 2004

Mark Zuckerberg [May 14] and roommates Eduardo Saverin, Andrew McCollum, Dustin Moskovitz and Chris Hughes, launched "Thefacebook", operating from their Harvard dorm room (H 33) at Kirkland House. Within the first month, more than half of all the university's undergraduates had registered for the service.

It was Zuckerberg's second venture, after"Facemash" [Oct 28].
The site's logo was designed by McCollum based on a piicture of Al Pacino he'd found online, and covered with ones and zeros. Also, it utilized a predominately blue color scheme because Zuckerberg has red-green color blindness and sees the color blue best.



Kirkland House (2015). Photo by Ywu01. CC BY-SA 3.0.

Six days after the launch, three seniors, Cameron and Tyler Winklevoss, and Divya Narendra, accused Zuckerberg of intentionally misleading them into believing he would help them build a social network called HarvardConnection.com, while he was instead using their ideas to build a competing product. Following the formal launch of Facebook in 2005, the three filed a lawsuit that resulted in each of them received 1.2 million shares in the company.

In March 2004, Facebook spread to Columbia, Stanford, and Yale, and in June moved operations to Palo Alto. It received its first investment later that month from PayPal [Feb 15] co-founder Peter Thiel.

In Aug. 2005, the company dropped "the" from its name after purchasing the domain facebook.com for $200,000.

In Dec. 2009, with 350 million registered users and 132 million unique monthly users, Facebook became the most popular social platform in the world. Its IPO in Feb. 2012 valued the company at $104 billion.

A 2010 survey by the American Academy of Matrimonial Lawyers (AAML) found that four out of five lawyers reported an increasing number of divorce cases citing evidence derived from social networking sites in the past five years. Two-thirds of the lawyers said that Facebook was the "primary source" of evidence in divorce proceedings.

A spokesperson for Facebook said: "It's ridiculous to suggest that Facebook leads to divorce. Whether you're breaking up or just getting together, Facebook is just a way to communicate, like letters, phone calls and emails."

Facebook had 2.7 billion monthly active users as of Oct. 2020, but has come under increasing criticism in recent years for its rather lax rules on privacy, hate speech, fake news, and their psychological effects on users.

There were several earlier social network sites, some of them very popular in their time, including Friendster [March 22] and MySpace [Aug 1].

RIAA Sues

Feb. 4, 2005

The Recording Industry Association of America (RIAA) filed a lawsuit against 83-year-old Gertrude Walton, accusing her of sharing 700 songs on the Internet under the user name “smittenedkitten.”

Eventually it came to light that Mrs. Walton didn’t own a computer and, more sadly, had died the previous year. The RIAA decided to drop the case.

For more RIAA action, see [Sept 8].

MapPoint in Norway

Feb. 4, 2005

A user of MSN’s MapPoint software wanted to find the best route from Trondheim to Haugesund. These Norwegian cities are around 500 miles apart, and driving between them should take about 11 hours.

However, MapPoint's preferred route was 1,700 miles long, involving an arduous two-day trip. The traveller had to cross the North Sea, the English Channel, and the Baltic Sea; and pass through seven different countries (the UK, France, Belgium, the Netherlands, Germany, Denmark, and Sweden).

Microsoft evangelist, Robert Scoble, posted a blog item apologizing for the error and indicated that the company was working on a fix. Meanwhile, "The Register" news website gathered reports of several other nonsensical MapPoint routes, and suggested that this might indicate the existence of a secret Microsoft flying car project.

MapPoint was eventually superseded by "MSN Maps", then "Live Search Maps", and currently "Bing Maps" and "Windows Maps".

For more maps, see [Feb 8], [March 6], [July 14], [Aug 9], [Sept 19], [Dec 24].