Nov. 22nd

Jeffrey David "Jeff" Ullman

Born: Nov. 22, 1942;

USA

Ullman has carried out foundational work on database systems and formal language theory, and is widely known by for his co-authored textbooks with Alfred Aho [Aug 9], John Hopcroft [Oct 7], and others on compilers (the Dragon book), the theory of computation (the Goldilocks book), algorithms, data structures, and databases. They are regarded as standards in their fields.

He was the Ph.D. advisor of Sergey Brin [Aug 21], and later served on Google's technical advisory board.

Randal L. Schwartz

(merlyn)

Born: Nov. 22, 1961;

USA

Schwartz is the co-author of several widely used books on Perl [Dec 18]. He was a founding member of the Perl Mongers, the Perl advocacy group, and a member of the Squeak Oversight Board [April 14].

Randal Schwartz. Photo by Chris Marquardt. CC BY-SA 3.0.

In July 1995, Schwartz was convicted of three felony counts after he cracked several passwords at Intel (where he worked as a sysadmin) as an illustration of how weak most passwords are. On Feb. 1, 2007, these ridiculous arrest and conviction records were sealed, and he is legally no longer considered a felon.

He coined the name "spaceship operator" for the Perl "<=>" which does a three-way comparison of two values.

Chess Between Computers

Nov. 22, 1966

The first chess match involving two programs was held at the Moscow Institute for Theoretical and Experimental Physics (ITEP) and at MIT. It pitted ITEP's software running on an M-2 (designed by Isaak Semyonovich Bruk [Nov 8]) against the Kotok-McCarthy program running on an IBM 7090. The games weren't played in real-time, but via telegraph correspondence. This meant the match took nearly nine months to complete, but started on this day.

The chess challenge had been proposed by Alexander Kronrod's group at ITEP in 1965 while John McCarthy [Sept 4] was visiting them.

Kotok-McCarthy was developed by McCarthy and Alan Kotok between 1959 and 1962, with the help of several students including Elwyn Berlekamp, Michael Lieberman, Charles Niessen, and Robert A. Wagner, and partly based on Alex Bernstein's landmark 1957 program [June 00]. It took around 5 – 20 minutes to calculate a move, and was estimated to play chess at a level comparable to an amateur with roughly 100 games of experience.

The ITEP program was written by Georgy Adelson-Velsky, Vladimir Arlazarov, Anatoly Uskov, Alexander Zhivotovsky, with advice from Russian chess master Alexander Bitman and three-time world champion Mikhail Botvinnik.

Victory eventually went to the Soviet software, three games to one, despite its hardware being less powerful. The ITEP code would later evolve into Kaissa, the first world computer chess champion [Aug 5]. Meanwhile, Kotok-McCarthy was used as the basis for Richard Greenblatt's [Dec 25] MacHack VI, released in 1967.

Shawn Fanning

Born: Nov. 22, 1980;

Brockton, Massachusetts

Fanning was the co-founder and lead programmer of Napster (1998), one of the first peer-to-peer (P2P) file sharing platforms.

The service provided a simple way for users to copy and distribute MP3 files [March 11], which ineveitably led the Recording Industry Association of America (RIAA [Feb 4; Sept 8]) to file a lawsuit against it on Dec. 7, 1999, alleging mass copyright infringement.

Napster was perhaps grateful, since the case generated a great deal of publicity, resulting in millions of new users. Though file sharing had long been popular via IRC [Aug 16] and USENET [Jan 29], Napster became the first massively popular P2P system. By Feb. 2001, it had over 26 million verified users, but the lawsuit did eventually have its intended effect. The service shut down in July 2001.

A quote from Fanning: "If you think about computer programming, it's as antisocial as it gets."

Sculley and Gates Agree (for a while)

Nov. 22, 1985

Next: [March 17]

Apple was thinking of suing Microsoft over the look of Windows 1.0 [Nov 20]. Bill Gates [Oct 28] heard of this and quickly organized a meeting with John Sculley [April 6], just two days after Windows had been released.

Sculley was asked to sign a confidential document that gave Microsoft a royalty-free license to use derivatives of the Mac's visual design. In return, Apple received an assurance that Mac development would continue at Microsoft.

Sculley signed on this day, and the agreement held together for over two years. On [March 17], 1988 Apple sued over visual elements in the upcoming Windows 2.0 [Dec 9].

For the story of Apple's visit to Xerox PARC, see [Dec 00].

The Max Headroom Intrusion

Nov. 22, 1987

The "Max Headroom Intrusion" involved the hijacking of the signal from two television stations in Chicago. After a brief, partially successful attempt to break into WGN-TV, the pirates completely succeeded in commandeering the signal broadcast by WTTW at around 11.15pm, during an episode of the "Doctor Who" [Nov 23] serial "Horror of Fang Rock".

Their videotaped broadcast lasted 90 seconds and featured an individual disguised as TV character Max Headroom, accompanied by a female accomplice.

Although the individuals were never identified, "Max" exposed his buttocks, which might have allowed for a positive identification if facial recognition software had been better at the time. The woman instructed the man to "Bend over, bitch!, and then commenced to spank him with a fly-swatter as the man screamed enthusiastically.

The "Doctor Who" episode eventually resumed; it starred Tom Baker as the Fourth Doctor, and Louise Jameson as Leela. Most viewers probably realized that the uncharacteristic interlude was not part of the storyline.

The first ever major broadcast intrusion took place on Nov. 26 1977, when the audio of a UK ITV broadcast was replaced with a message from a person calling themselves an alien representative of an "Intergalactic Association." He warned, "All your weapons of evil must be removed… You have but a short time to learn to live together in peace."

Mind if I Take this Call?

Nov. 22, 1989

Bill Gates [Oct 28] was on a tour of Microsoft's product support new office building, and asked one of the people working the phones, "Mind if I take this call?"

He put on a headset and answered the phone, identifying himself only as "William." He talked to the customer, searched for an answer, and walked them through fixing the problem. The customer was pleased with the service and "William" ended the call with, "And thank you for using Microsoft products."

Later, the same customer called back with a follow-up question. This time, he asked directly for William, saying he "straightened it all out."

The Trojan Room Coffee Pot

Nov. 22, 1993

The Trojan Room coffee pot was located next to the Trojan Room, in the old Computer lab at the University of Cambridge.

In 1991, a 128×128 pixel grayscale camera was pointed at the pot and connected to the lab's local network through a video capture card fitted to an Acorn Archimedes [June 11].

The Trojan Room coffee pot, as displayed in XCoffee. Photo by Quentin Stafford-Fraser. CC BY-SA 3.0.

Quentin Stafford-Fraser wrote the client software, called XCoffee, while Paul Jardetzky implemented the server. On this day, Daniel Gordon and Martyn Johnson set up a live stream from the device over the Web, creating the very first webcam; it used HTTP, not HTCPCP [April 1].

The coffee pot became so popular that Stafford-Fraser remembers receiving emails asking if a light could be left on overnight so the pot could be seen in different time zones. The Cambridge Tourist Information office also had to deal with visitors asking for directions to the lab to see the coffee pot for real.

Stafford-Fraser has remarked: "I sometimes think nothing else I'm ever involved in again in my life will get this much coverage, and it was just one afternoon's crazy idea."

Following the lab's move, the camera was switched off on Aug. 22, 2001. The last coffee machine, a Krups, was auctioned off on eBay for £3,350 to the German news website "Spiegel Online". The pot was refurbished, and reconnected to the Web in the magazine's editorial office. However, since 2015, the coffee maker has been on permanent loan to the German Museum of Technology in Berlin, which sadly doesn't have it linked to the Web.

For more Internet connectivity firsts, see [?? 1982], [Aug 00], [Sept 1], [Dec 3].

Sega Saturn

Nov. 22, 1994

The Sega Saturn was the 32-bit game console replacement for the successful Sega Genesis [Oct 29]; it was released in Japan on this day.

The Saturn used a dual-CPU architecture designed around the new Hitachi SH-2 and a separate video display processor. This was a relatively late addition to the design (early 1994), in order to better compete with Sony's PlayStation that went on sale in Japan on [Dec 3].

Although the Saturn is remembered for several good games, including "Nights into Dreams" and the Panzer Dragoon series, its reputation is somewhat tarnished by its complex hardware design and limited third-party support.

Its greatest disadvantage was that both CPUs shared the same bus and were unable to access system memory at the same time. Third-party development was also hindered by the lack of useful software libraries and development tools, requiring programmers to write in assembly language to achieve good performance.

Retailers in the US were also upset by the sudden change in its release date, from Sept. 2, 1995 to [May 11] 1995. This was to preempt the PlayStation which was due out on Sept. 9, 1995.

Toy Story

Nov. 22, 1995

"Toy Story" was the first feature-length computer-animated film, the first feature film produced by Pixar [Feb 3], and marked the directorial debut of John Lasseter [Nov 00].

The storyline (as if you didn't know it) involves a cowboy doll, Woody, who becomes jealous when a new spaceman action figure, Buzz Lightyear, supplants him as top toy in six-year old Andy's affections.

The 114,240 frames of the film (each one about 500 MB in size) were rendered over 800,000 hours on 117 SparcStation 20s and a SparcServer 1000 [July 00]. The artwork was created by 28 animators using Pixar's RenderMan software.

The character of Andy is named after Andries Van Dam [Dec 8], who taught many of the film-makers. That's also a reference to Ed Catmull [March 31], president of Pixar, and another pioneer of computer graphics: after Woody helps Buzz escape from a crate, a can labeled "Catmull Rootbeer" is clearly visible for a few moments. Also, Buzz is served tea from a Utah teapot [Sept 00].

The first feature-length computer-animated film released by Disney was "Chicken Little, on Nov. 4, 2005, some ten years later. However, they had been dabbling in CGI for some time including in "The Black Cauldron" (1985), "The Great Mouse Detective" (1986), "Beauty and the Beast" (1991), and Dinosaur (2000).

"Chicken Little" was panned by the critics, although it performed pretty well at the box office. Shortly afterwards, Disney purchased Pixar outright in Jan. 2006, and Ed Catmull [March 31] and John Lasseter were installed as the new creative leads of the company's animation efforts.

Currently, Disney's last traditionally animated theatrical film was "Winnie the Pooh" (2011).

Xbox 360

Nov. 22, 2005

The Xbox 360 (the successor to the Xbox [Nov 15]) was unveiled on May 12 on MTV by the actor Elijah Wood and the band, "The Killers". After the "Zero Hour Launch Party" on [Nov 20], the console went on sale just after midnight on this day.

The "Red Ring of Death." Photo by Droobey.

The 360's main competitors were Nintendo's Wii [Nov 19] and Sony's PlayStation 3 [Nov 11], and although not the best-selling console of its generation, the 360 managed to ship over 80 million units. An updated version of Xbox Live [Dec 20], for online multiplayer gaming and media streaming was a major selling point, and helped popularize the idea of the 'connected console'.

The 360 suffered from worse-than-usual manufacturing defects in its early years, including the infamous error known as the "Red Ring of Death" (RRoD). Some sources put the RRoD's failure rate across all the consoles as high as 16%. A 360 delivered the bad news by lighting up three of the four red quadrants of the ring that surrounded the power button. An owner's only recourse was to ship the console back to Microsoft for repairs, which was a major hassle. Instead, multiple homegrown cures were suggested, and an

entire book was published on the issue.

The reason for the RRoD was never revealed officially, but may have been due to the graphics chip which was designed in-house by Microsoft, or perhaps because of the use of the wrong type of lead-free solder which became brittle after long exposure to high temperatures. For more Windows' Screens (not screams) of Death, see [July 27].

In March 2018, the USS Colorado, the US Navy's latest Virginia-class attack submarine, went into service with an unconventional piece of equipment: an XBox 360 controller to operate its imaging system, replacing a complex helicopter-style control stick.

Not only were the previous controls hard to manage, the handgrip and imaging control panel cost about $38,000, compared to the XBox 360 controller's $20. Training time for the XBox took minutes, compared to hours for the old controls.

Xbox One Released

Nov. 22, 2013

Microsoft hadn't released a new Xbox for eight years [prev entry]. Significantly, this version moved away from a PowerPC-based architecture [Oct 2] back to an x86-64 made by AMD [May 1]. More visible to the user was the new Kinect movement-based user interface (marketed as the "Kinect 2.0"), and streaming entertainment options such as Xbox Music and Xbox Video. In line with Microsoft's general realignment, the console also placed an increased emphasis on cloud computing, as well as social networking.

The Xbox One mainly competed against Sony's PlayStation 4 [Nov 15] and Nintendo's Wii U [Nov 18] and Switch, and was criticized for running games at a lower level of detail than the PlayStation.

Another issue was its nonintuitive user interface, with a large number of hidden options. Users quickly equated these to "hunting for treasure in a messy room". There were several hardware revisions which fixed many of the perceived problems.

The Xbox Series X launched on Nov. 10, 2020, giving Microsoft a two-day head start over Sony's PlayStation 5, which came out on Nov. 12.