Oct. 25th

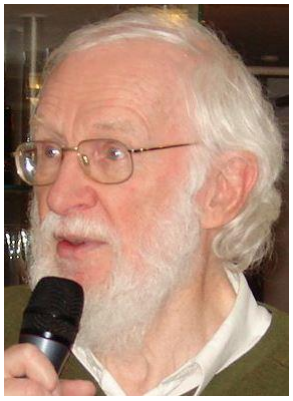
Peter Naur

Born: Oct. 25, 1928;

Frederiksberg, Denmark
Died: Jan. 3, 2016

Naur made numerous contributions to the development of ALGOL 60 [Jan 11], including being the main author of the language committee's report.

He also helped devise Backus-Naur form (BNF), which has since beecome the standard way to define programming language syntax. Naur actually preferred that it be called Backus [Dec 3] Normal form, but Donald Knuth [Jan 10] has argued that Backus–Naur is better since BNF is "not a normal form in the conventional sense".



Peter Naur (2008). Photo by Eriktj. CC BY-SA 3.0.

Naur also disliked the phrase "computer science", preferring "dataology" or "data science". The former was adopted in Naur's home country Denmark, and in Sweden, as datalogi.

In the 1970's, he was a strong opponent of Edgar Dijkstra [May 11] and Niklaus Wirth's [Feb 15] structured programming approach, and in 2004 gave an invited talk after winning the Turing Award [June 23] which heaped criticism on the utility of the Turing test [Oct 00]. However, he began by expressing regrets that he might offend some of the audience.

EMCC Loses Strauss

Oct. 25, 1949

In the summer of 1948, the Eckert-Mauchly Computer Corporation (EMCC [Dec 8]), founded by J. Presper Eckert [April 9] and John Mauchly [Aug 30], had almost run out of money while developing the UNIVAC [March 31].

In the nick of time, Henry L. Straus, president of American Totalisator, a company that made machines for calculating horse racing odds, convinced his directors to invest $500,000. It was a good bet, because within a year EMCC had received contracts for UNIVACs worth some $1.2 million.

But on this day, Straus was killed in a plane crash, and soon after American Totalisator's directors withdrew their support from EMCC.

Eckert and Mauchly were forced to look for a buyer for their company, and sold EMCC to Remington Rand [Jan 25] on Feb. 15, 1950. They had contacted IBM first, but Thomas Watson, Sr. [Feb 17] said no, along with the somewhat mysterious comment: "no reasonable interaction possible between Eckert-Mauchly and IBM."

Eric J. Bina

Born: Oct. 25, 1964;

Champaign, Illinois

Bina joined the National Center for Supercomputing Applications (NCSA [Jan 15]) in 1991 as a programmer. A few years later, Bina and Marc Andreessen [July 9] started working on NCSA Mosaic [Sept 28] with version 0.1 debuting in June 1993. The pair subsequently helped found Netscape Communications [March 25].

Andreessen has written: "A lot of people don't realize that Eric did all the hard programming on Mosaic. As far as I know, the entire time he only ate Skittles and Mountain Dew!"

Bina's unofficial job title (which appeared on his business cards) was "Unsung Hero."

Hugh Herr

Born: Oct. 25, 1964;

Lancaster, Pennsylvania

In 2011, *Time* magazine called Herr the "Leader of the Bionic Age" because of his work in biomechatronics – technology that combines human physiology and electromechanics. A double amputee (due to a mountaineering accident), he had responded by designing prostheses that enabled him to climb again, at a level on par with most able-bodied climbers.

In 2014, Herr's team developed the first exoskeleton which automatically provided mechanical assistance to reduce the effort of walking.

VAX 11/780 Introduced

Oct. 25, 1977

Gordon Bell [Aug 19] led the design effort behind the VAX 11/780 at DEC [Aug 23], and Bill Strecker (Bell's former doctoral student at Carnegie Mellon) became its chief architect.

The VAX acronym stood for "Virtual Address Extension", reflecting that the machine was able to run most PDP-11 [Jan 5] programs without modification. This feature was deemed essential in order to persuade customers to move away from DEC's aging PDP line [Oct 30], [March 22].

The 11/780's performance was a magnificent one million instructions per second (MIPS), which quickly became the benchmark for other machines to beat. It also offered a massive 4 GB of virtual memory, hundreds of times the capacity of most minicomputers of the

time. As a result, the 11/780 quickly became a best-seller, with over 400,000 sold during its lifetime, turning DEC into the second largest computer company of the 1980's.

A whole family of "Vaxen" was eventually released, including the less powerful 11/750 in 1980, and the compact MicroVax II [Oct 18].

Even today, many VAX 11/780s are still in use. For example, as components of the missile systems used by the F-15 and F-18 fighter jets, in older US Navy submarines, and in the control and test systems for Minuteman ICBMs [Aug 5].

For the oldest working computer, see [April 0].

VMS
Oct. 25, 1977

DEC's VMS (Virtual Memory System) 32-bit OS was released at the same time as the VAX 11/780 [previous entry].

Roger Gourd was the project lead, with engineers Dave Cutler [March 13] (who would later develop Microsoft's Windows NT [July 27]), Dick Hustvedt, and Peter Lipman.

VMS was renamed OpenVMS [Nov 17] when it was redeveloped for the Alpha processor [Feb 25]. The "Open" suggested its support for the POSIX standard, and that it now sported a GUI.

Vixen Released
Oct. 25, 1984

The Vixen was Osborne Computer's second portable ("luggable," really), following on from its highly successful Osborne 1 [April 3]. It was smaller, lighter, cheaper, and had higher-capacity floppy drives. It was also one of the first portables to offer an external hard disk drive. This was attached via a 'Shugart Associates System Interface' – which was soon renamed SCSI [March 3].

A Prototype Osborne Vixen. Photo by DWmFrancis. CC BY-SA 3.0.

Rather surprisingly, the Vixen proved to be a complete failure: the problem was its use of CP/M [May 19], which was seen as yesterday's news after the release of the IBM PC [Aug 12] in 1981 with its cheap-and-cheerful PC-DOS. The financial hit led to Osborne closing later that year.

First Vintage Computer Festival
Oct. 25-26, 1997

The Vintage Computer Festival, founded by Sellam Ismail, is an annual event celebrating the history of computing. The first one was held at the Alameda County Fairgrounds in California, with the advertising promising: "There'll be lots of big computers with blinking lights."

Ismail is said to possess one of the largest private collections of computers and video games, which he stores in a 4,500-square-foot warehouse in Silicon Valley. His holdings include more than 1,500 computers, 3,500 computer-related books, 20,000 magazines, and thousands of programs and manuals.

Windows XP Released
Oct. 25, 2001

Prev: [Feb 17] Windows 2000
Next: [Nov 30] Windows Vista

Microsoft released Windows XP (standing for "eXPperience") in two editions: home and professional, accompanied by a $250 million publicity campaign.

The system was based on the Windows 2000 interface and the Windows NT kernel, bringing both branches together for the first time. However, its "compatibility mode" allowed most software written for older versions of Windows to still run.

Over 400 million copies had been sold by Jan. 2006, and XP eventually became the longest living Microsoft OS, passing through three major updates and officially supported until April 2014 – 13 years after its release.

XP's biggest problem was security because, although it had a firewall built in, it was turned off by default. Also, its huge popularity attracted hackers, who mercilessly exploited its flaws, especially in Internet Explorer [Aug 27].

XP's codename during development was "Whistler", a town in British Columbia where many Microsoft employees would go skiing.

The default desktop photo in XP was called "Bliss" [Jan 5].

Everyone's Dead
Oct. 25, 2002

St Mary's Mercy Medical Center in Grand Rapids, Michigan started using a new patient management system, which at some point decided to start recording that every patient treated at the center had died. The number of 'deaths' had reached around 8,500 before the error was discovered in December.

During this time, the system (as mandated by law)had notified Social Security and the insurance companies that the patients were dead.

For more computer errors, see [Feb 25], [May 26], [June 4], [Aug 1], [Sept 23], [Oct 24].

RFID Passports

Oct. 25, 2005

The US State Department announced that all US passports would be equipped with radio frequency ID (RFID [Sept 21]) chips starting from Oct. 2006.

The chip would contain personal information, including the name, nationality, sex, date of birth, place of birth, and a digitized photograph of the passport holder. The 64 KB of memory also gives it enough room to store more biometric data in the future, such as fingerprints and iris scans.

Supposedly, the chip can only be read by an RFID device when the passport is open, and the Department of State's rigorous Basic Access Control (BAC) security protocol prevents any access to the data unless the printed information within the passport is also known [Aug 9]. BAC uses data read electronically from inside the passport to negotiate a session key with the RFID reader.

Nest Learning Thermostat

Oct. 25, 2011

The Nest Learning Thermostat was an early product marketed as belonging to the trendy Internet of Things (IoT [Sept 21]). It allowed remote access to a user's home's thermostat via a smartphone, and could remember what temperature was preferred by monitoring daily usage patterns over the preceding few days.

The thermostat was the first product of Nest Labs, founded in 2010 by former Apple engineers Tony Fadell [March 22] and Matt Rogers. The idea came to Fadell while he was building a vacation home, and decided all the available thermostats to be inadequate. Google later acquired Nest Labs for $3.2 billion.

The earliest IoT device was probably CMU's coke machine [?? 1982], but ATMs [June 27] dating from the late 1960's may count as an earlier example. The 1993 Trojan Room Coffee Machine [Nov 22], and the Hyper Text Coffee Pot Control Protocol [April 1] are arguably also antecedants.

Treasure Island Barge

Oct. 25, 2013

CNET reporter Daniel Terdiman reported on his visit to Treasure Island, San Francisco, a former US Navy base, where a mysterious barge made up of shipping containers was moored.

There appeared to be four such barges spread around the US, named BAL001 to BAL0100, all owned by a "By and Large" shell company that was actually owned by Google.

The barge off the coast of Maine was four containers long, wide, and high. The San Francisco structure also had poles extending from its top that may have been for holding antennas or sails.

After much fevered media speculation, Google issued an email statement on Nov. 6: "Although it's still early days and things may change, we're exploring using the barge as an interactive space where people can learn about new technology."

It seemed likely that Google may have wanted to use barges as office space since it allowed them to avoid the need for city building permits and public plans. However, all the hullabaloo persuaded Google to abandon the project.

A completely unrelated point of interest is that the NYC Department of Correction currently runs the largest US prison ship, the Vernon C. Bain Correctional Center.

AI Portrait Sells

Oct. 25, 2018

A portrait created by AI software fetched $432,500 at Christie's in NYC [Feb 23; June 15]. The auctioneers had thought it would go for around $8,000, but a bidding war between five parties increased the selling price considerably.

The piece entitled "Edmond de Belamy, from La Famille de Belamy" depicts a blurry and unfinished image of a man. It was created by Obvious Art, a Paris-based collective, with help from a GAN (Generative Adversarial Network) machine learning algorithm which processed a data set of 15,000 portraits painted between the 14th and 20th centuries.

It is signed at the bottom with

$$\min_G \max_D E_x[\log(D(x))] + E_z[\log(1 - D(G(z)))]$$

part of the maths behind the code: