Sept. 3rd

Wayne Sanger Green II

Born: Sept. 3, 1922;

Littleton, New Hampshire
Died: Sept. 13, 2013

Green was the founder of BYTE, *Kilobaud Microcomputing*, *80 Micro*, and many other computer magazines. He started BYTE in Sept. 1975, with Carl Helmers [May 12] as editor. However, Green registered the magazine in his wife's name since he was in the middle of an IRS audit at the time; this proved to be a serious miscalculation.

One day in Nov. 1975, Green came to work, and found that his ex-wife (Virginia Londner Green, now Peschke) and the rest of the BYTE staff had moved out, and taken the Jan. issue with them.

Green was somewhat miffed by this development, but decided to bounce back with a new magazine called *KiloByte*. The BYTE team quickly responded by trademarking KILOBYTE, forcing Green to rename his magazine *Kilobaud*. (Personally, I would have gone for *MegaByte*.)

Green was also active in the ham radio world, using the call sign W2NSD ("NSD" standing for "Never Say Die").

Edward Francis Rent

Born: Sept. 3, 1926;

Pittsburgh, Pennsylvania
Died: Oct. 3, 2008

Rent published two IBM internal memoranda in the 1960s that showed how the log plot of the number of pins against the number of gates in a chip's design tended to follow a straight line. This was later dubbed *Rent's rule*, but it wasn't until two other IBM employees, B.S. Landman and R.L. Russo, wrote a paper on the topic in 1971 that the equation became more widely known.

In the 1990s, yet another IBMer, W.E. Donath, discovered that Rent's rule could also be used to estimate the average wirelength and the wirelength distribution in VLSI chips.

Hilbert's Second Problem

Sept. 3 -10, 1928

David Hilbert (1862 – 1943) posed his second problem at the 1900 Paris conference of the International Congress of Mathematicians (ICM): give a proof that arithmetic is free of any internal contradictions. (All told, he proposed 23 problems, but only ten during the congress.)

At the ICM in Bologna during this week in 1928, Hilbert restated the problem in three parts: is mathematics complete, is it consistent, and is it decidable?

David Hilbert (1912). Photo by University of Göttingen.

In 1931, the first two parts were answered in the negative by Kurt Gödel [April 28]. In particular, his incompleteness theorem showed that no proof of the consistency of Peano arithmetic (i.e. the natural numbers) could be formulated within the arithmetic itself.

The third part, the decidability question, is often called by its more catchy Germany name, the Entscheidungsproblem (Decision Problem). Its relevance to computing comes in the way that it can be rephrased as a question of finding a mechanical process (or algorithm) that can be applied to any first-order logic statement to determine its truth.

Working independently, Alonzo Church [June 14], Alan Turing [June 23], and Emil Post [Feb 11] all published answers to the Entscheidungsproblem in 1936. Turing showed, by means of his universal Turing machine, that a correct decision was impossible. Church came to the same conclusion but by employing functions defined with his lambda calculus. It quickly became clear that these two approaches were equivalent, and were merged into the Church–Turing thesis.

Post's work on the Entscheidungsproblem was also machine-based, and essentially equivalent to the Turing machine. For that reason, it's sometimes called the Post–Turing machine. Turing's paper [Nov 12] was sent for publication in May 1936, just a few months before Post's in October.

Douglas Edward Crockford

Born: Sept. 3, 1953?;

Minnesota

Crockford is known for his involvement in the development of JavaScript [July 4], for having popularized the JSON (JavaScript Object Notation) data format, and for various JavaScript tools such as JSLint (a static code analysis tool) and JSMin (a source code minifier).

When Crockford released JSLint in 2002, the MIT license was customized to state that "The Software shall be used for Good, not Evil". However, it also granted "IBM, its customers, partners, and minions" permission "to use JSLint for evil", a solution which appeared to satisfy IBM's lawyers.

Crockford worked at Lucasfilm/LucasArts [Sept 12] for nearly eight years, and posted a memorable article, "The Expurgation of Maniac Mansion," to a videogaming bulletin board in 1990. It amusingly recounts his efforts to modify the "Manic Mansion" game so that Nintendo [Sept 23] would release it, despite the company's increasingly obscure and confusing demands for changes.

IBM 610 Released

Sept. 3, 1957

The IBM 610 Auto-Point, also known as the Personal Automatic Computer (PAC), can make a strong claim to being the first "personal" computer. It was designed to be used by one person at a time, weighed about 800 pounds, and could be deployed in an ordinary office without any special electrical or air conditioning requirements. It may also have been the first computer controlled via a keyboard.

Its principal designer was John Lentz, working out of the Watson Lab [Feb 6] at Columbia University. However, the construction of the first prototypes was farmed out to ElectroData [April 19] in Pasadena, which also made contributions to the design.

The 610 saw widespread use in military and academic circles for scientific tasks. Military sites often had three or four, with one reserved for outside work in the field.

IBM 610. Photo by IBM. CC BY-SA 4.0.

There's some debate over when the 610 first became operational. Some sources claim 1948, but 1954 or 1955 seem more likely. Also, its commercial release was delayed by IBM's rollout of its 650 [July 2] and 700 series. Nevertheless, this still means that it appeared before the other contenders for first "personal" computer, the Bendix G-15 [March 00] and the Librascope LGP-30 [Sept 00], which debutted in 1956.

Cyberspace Coined

Sept. 3-7, 1981

The word "cyberspace" was coined by William Gibson in his short story, "Burning Chrome" to describe the "mass consensual hallucination" inherent in computer networks. The story was published in *Omni* magazine in July 1982, but Gibson first gave a reading of the piece at the 39th Worldcon in Sept. 1981; there were four people in the audience.

The story went on to inspire Gibson's "Sprawl Trilogy" of novels, which begins with "Neuromancer" (1984). In that book, Gibson first used the term "matrix" [March 31] to refer to a visualized Internet.

The parent term for "cyberspace" is "cybernetics", derived from the Ancient Greek κυβερνήτης (kybernētēs – steersman, governor, pilot, or rudder). It was introduced to computing by Norbert Wiener [Nov 26], and became the title of his 1948 book.

The Star7 PDA

Sept. 3, 1992

Prev: [April 8] Next: [Jan 00]

The Oak language, which would eventually become Java, was developed by the Green team [April 8] at Sun Microsystems. Their aim was to create tools for programming next-generation smart appliances, specifically set-top boxes for interactive TV.

By the summer of 1992, large parts of the new platform were operational, including the Green OS, the Oak language, and various libraries.

The software ran on a PDA called the Star7 (or *7) that sported gesture based interaction, wireless connectivity, and a smart user agent called "Duke." Duke was created by Joe Palrang, and would later become the Java mascot (Duke that is, not Palrang).

Developed almost a year before the Apple Newton [Aug 3], the Star7 was first demonstrated to Sun's senior management, including Bill Joy [Nov 8] and Scott McNealy [Nov 13], on this day. James Gosling [May 19] and the team also made a video about the Star7, which is online at YouTube.

Sun pitched Star7 to several cable companies, but it didn't generate much interest. Set-top boxes and interactive TV were considered yesterday's news. The hot topic of 1993 was the World Wide Web, especially after NCSA unveiled their Mosaic browser on [Sept 28] 1993.

In June and July 1994 – after three days of brainstorming with John Gage (Sun's Director of Science) – the team re-targeted the platform towards the Web, and Patrick Naughton wrote a small prototype browser called WebRunner (named after the movie "Blade Runner" [June 25]). It was almost time for Java to be born [Jan 00].

AuctionWeb

Sept. 3, 1995

AuctionWeb was founded on this day by Pierre Omidyar in his living room. The company changed its name to eBay in Sept. 1997, although Omidyar first tried to register the domain echobay.com, but found it already taken by "Echo Bay Mines", a gold mining company.

The auction service was originally one of several things

on Omidyar's site, which also had a section devoted to the Ebola virus. and a page about a biotech startup where Omidyar's fiancé worked.

The first item auctioned on the site was a broken laser pointer, which was sold for $14.83 to a Canadian. Omidyar contacted the winning bidder to ask if he understood that the laser pointer didn't work. The buyer responded with "I'm a collector of broken laser pointers." Another version of the story says that the buyer needed parts from the broken pointer to finish an invention.

Another frequently repeated story is that eBay was founded to help Omidyar's fiancée trade Pez candy dispensers. However, that anecdote was invented by eBay's public relations manager, Mary Lou Song.

In March 1998, Omidyar and eBay president Jeff Skoll brought in Meg Whitman [Aug 4] to put together an experienced management team.

Big Ball of Mud

Sept. 3-5, 1997

The term "A Big Ball of Mud" was popularized by Brian Foote and Joseph Yoder's 1997 paper of the same name which they presented at EuroPLoP. The phrase refers to a haphazardly structured, sprawling, sloppy, duct-tape-and-baling-wire, spaghetti-like software system.

Foote and Yoder identified a few reasons for such a system appearing: the use of throwaway code, piecemeal growth, the overriding need to "Keep it working", and a reliance on Copy/Paste, which ensures that faulty code is reproduced in many places,

Brian Marick first suggested the name to the authors during a meeting of the University of Illinois Software Architecture Group, along with the observation that it was, perhaps, the dominant software architecture.

However, the term may have arisen earlier, during the 1970s, to refer to Lisp [April 15] in a positive sense. Joel Moses (one of the authors of Macsyma [July 00]) may have said: "APL [Dec 17] is like a beautiful diamond – flawless, beautifully symmetrical. But you can't add anything to it. If you try to glue on another diamond, you don't get a bigger diamond. Lisp is like a ball of mud. Add more and it's still a ball of mud – it still looks like Lisp."

The Lipad Mud Volcano. Photo by Mike Prince. CC BY 2.0.

However, Moses strongly denies saying this, claiming he instead thought of Lisp as a "bean bag" because it always returns to its original shape

HP / Compaq

Sept. 3, 2001

Hewlett-Packard (HP) [Jan 1] and Compaq [Feb 14] announced a $25 billion merger which shocked the industry. Michael Dell [May 3] called it "the dumbest deal of the decade."

It had been constructed by HP CEO Carly Fiorina [Sept 6] despite fierce opposition from the Hewlett and Packard families, and several large shareholders.

For three years afterwards, the company stumbled, HP laid off some 30,000 employees, and Fiorina was replaced in 2005 by Mark Hurd, after the company had lost half its value. The Compaq brand name was discontinued in the US in 2013, and on [Oct 6] 2014, HP announced it would split into two companies.