

Sept. 20th

Henry Samueli Born: Sept. 20, 1954;

Buffalo, New York

In 1991, Samueli co-founded Broadcom with one of his former UCLA students, Henry Nicholas. Each invested \$5,000 and the company was originally based at Nicholas' Redondo Beach home.

It quickly grew into a leading fabless manufacturer (one that outsources fabrication to a separate semiconductor foundry), focusing on the wireless and broadband communication industries. Products have included ICs for Ethernet [June 23] and wireless LANs, home networking devices, and cellular phones.

In 2012 the Linux Foundation listed Broadcom as one of the top ten companies contributing to the development of the Linux kernel [March 14]. Broadcom also organizes the fabrication of several chips for the Raspberry Pi [Feb 29] (Eben Upton, the RPi founder works for Broadcom).

Samueli is the owner of the "Anaheim Ducks", a professional ice hockey team, which he purchased from the Walt Disney company in 2005. At the time, the team was called the "Mighty Ducks of Anaheim", a name derived from the 1992 Disney film "The Mighty Ducks".

Ken McCarthy Born: Sept. 20, 1959;

New Haven, Connecticut

McCarthy originated the idea of click-through rate (CTR) to measure the success of an online advertising campaign. It's calculated by dividing the number of clicks upon an ad by the number of its "impressions" (i.e. how many times people see the ad). For example, if a page had attracted 3,838 visitors and the ad had garnered 31 clicks,

then it would have a CTR of 0.81% (31/3838).

The very first online ad for AT&T on the HotWired website had a CTR of 78% [Oct 27]. Not surprisingly, CTRs for banner ads quickly plummeted, with most now averaging around 0.2%. Indeed, even a 2% CTR would be considered wildly successful.

CTR was the first entry in the burgeoning field of web analytics, which now includes metrics such as bounce, exit rate, visit duration, and page visibility time.

Data General-One Released Sept. 20, 1984

The Data General-One (DG-1) is considered the first complete, truly portable, IBM-compatible PC [Aug 12]. It came with a full-size 11-inch LCD display, weighed 10 pounds and could run for up to eight hours on batteries.



DG-1. Photo by Austin Calhoon. CC BY-SA 3.0.

Unfortunately, the LCD display proved less than ideal, offering both poor contrast and a narrow viewing angle. *InfoWorld* stated that "the god-awful screen made a better mirror than display", and *PC Magazine* reported that "The exchange 'Why don't you turn it on?' / 'It is on' is no joke. It happened in our offices."

Another problem was its use of 3.5" diskettes; popular software

titles were still mostly only available on 5.25" disks.

It was also expensive, especially when extra RAM and an external 5.25" drive were added. It did, however, come with a Pierre Cardin bag.

Elite Released Sept. 20, 1984

Elite is a space trading game, developed by David Braben and Ian Bell, originally for the BBC Micro [Dec 1] and Acorn Electron [Dec 5]. It took two years to write while the pair were students at Cambridge.

It has been called the first open-ended, open-world game, and was one of the first home games to employ wire-frame 3D graphics with hidden line removal. Another novelty was the inclusion with the game of "The Dark Wheel", a novella by SF author Robert Holdstock.

The Elite universe contains eight galaxies, each with 256 planets to explore. Due to the limited capabilities of 8-bit computers, these worlds (and their names) were generated in software, which caused a few problems. Braben and Bell were forced to destroy an entire galaxy after finding a planet named "Arse".

There have been claims that much of the game's content was derived from the Traveller tabletop role-playing game (1977), but Braben has denied this several times.

The game's title derives from one of the player's goals of raising their combat rating to the exalted heights of "Elite".

Elite was hugely influential, serving as an inspiration for games such as "Wing Commander" [Feb 12], "Grand Theft Auto" [Oct 21], and "Eve Online" [May 6].

Braben later became a co-founder of the Raspberry Pi Foundation [Feb 29].

The Mac Portable Sept. 20, 1989

The release of the Mac [Jan 24] Portable generated a lot of excitement, but its sales figures were disappointing.



The Mac Portable. Photo by Rama. CC BY-SA 2.0 fr.

It was one of the first laptops to employ an active matrix display, and despite its responsiveness and sharpness, it was quite hard to read the screen in low light.

Also, at 16 pounds (mainly due to its lead-acid batteries) and 4-inch thickness, the Portable was both heavy and bulky. In addition, having the batteries charge in series with the power supply turned out to be a poor design decision because it meant that if the batteries were faulty, then the computer couldn't boot.

One reviewer dubbed the Portable, the "world's most intelligent boat anchor."

First Encyclopedia CD-ROM Sept. 20, 1989

Compton's Multimedia Encyclopedia CD-ROM contained the entire 26 volumes of its paper-based encyclopedia, a dictionary with 65,000 entries, multimedia in the form of recorded speeches, animations, and music, and 15,000 illustrations, about a quarter of which were in color. The application took a 60-member team 18 months to complete.

Frank E. Compton had published the first paper-based edition in 1922, as the "Compton's Pictured Encyclopedia" .

Encyclopædia Britannica [Dec 6] acquired the company in 1961.

Although Compton's was the first multimedia encyclopedia, Grolier's (with the help of Gary Kildall [May 19]) had beaten it to market with the text-only "Academic American CD Encyclopedia" in 1985.

The Irina Virus Sept. 20, 1996

Rumors circulated of a deadly new virus known as Irina, which researcher Graham Cluley eventually revealed to be a PR-stunt gone wrong. It had all begun after Penguin Books decided to advertise a new interactive e-book, entitled "Irina", written by the SF author Steven Baxter.

Guy Gadney (the now former head of electronic publishing at Penguin) sent out a bogus letter to newspapers and TV stations warning of the Irina virus. It claimed to be from a Professor Edward Prideaux of the "College of Slavonic Studies" in London. Prideaux happened to be one of the main characters in the book, but the letter made no mention of Penguin's literary connection.

Some newspapers received six copies of the letter, and the similarly named "School of Slavonic and East European Studies" was inundated with calls to the fictitious Prideaux.

Tor Sept. 20, 2002

Tor supports anonymous Internet communication by directing data packets through a worldwide, volunteer network of more than seven thousand relays which effectively conceal the user from network surveillance or traffic analysis.

The technology was developed in the mid-1990s by US Naval Research Lab employees, Paul Syverson, Michael G. Reed, and David Goldschlag, with the aim

of protecting online US intelligence communication.

"Tor" is an acronym of the project name, "The Onion Router". The alpha version was launched on this day.

In [June 5] 2013, Edward Snowden used Tor to send information to the *Washington Post* and *The Guardian* newspapers. In Oct., *The Guardian* reported that some of Snowden's documents revealed that the NSA [Oct 24] had repeatedly tried to crack Tor. It had failed to break its core security, although it had some success attacking individual Tor nodes. The newspaper also published a 2012 NSA classified presentation, reassuringly entitled, "Tor Stinks".

Yale Teaching Sept. 20, 2006

Yale announced that it would upload videos of some of its courses to the Internet for free, complete with syllabi and lecture notes.

Several other Ivy League schools already offered free online courses, notably MIT's OpenCourseWare which began in 2001 [April 26] and the Open Learning Initiative at CMU dating from 2002, but Yale was the first to emphasize video content.

The money for Yale's philanthropy came from the William and Flora Hewlett [May 20] foundation, which was also an early backer of MIT's project.

Yale taped three introductory courses in the first semester : "Introduction to the Old Testament", "Fundamentals of Physics", and "Introduction to Political Philosophy".

GNU GPL Violation Sept. 20, 2007

The Software Freedom Law Center (SFLC) filed the first copyright infringement lawsuit for an alleged violation of a GNU

General Public License (GPL) [Oct 4]. The developers of BusyBox, a “starter kit” of UNIX tools for Linux, argued that a Monsoon Multimedia product contained BusyBox but had not released the source code as stipulated in the GPL.

Eventually, the suit was settled with Monsoon complying with the license and paying a fine.

MakerBot Replicator 2 Sept. 20, 2012

MakerBot Industries released the “Replicator 2” 3D printer, aimed at non-expert users. *Wired Magazine* [Jan 2] called it the company’s “Macintosh moment,” and mildly added that “This machine will change the world.”

However, the company was also criticized by the open source community for making the printer’s metal frame proprietary, along with its GUI printing software.



The Replicator 2. Photo by OhanaUnited. CC BY-SA 4.0.

MakerBot was founded in Jan. 2009 by Bre Pettis, Adam Mayer, and Zach Smith. Smith was also one of the founders of the RepRap Research foundation, a non-profit group involved in early open-source 3D printers.

MakerBot also operated Thingiverse, the largest online 3D printing community, and a repository for design files.

However, by 2015, Pettis, Mayer, and Smith had moved on, and although the company had sold over 100,000 printers by April

2016, its share of the market was shrinking.

Perhaps one problem was that MakerBot had moved away from open source hardware towards proprietary solutions in later models. Another commentator noted that a “de-hyping” of the industry was occurring, with the public perception of 3D printing finally catching up with the reality.
