

Oct. 8th

## Alexey Andreevich Lyapunov

**Born: Oct. 8, 1911;**

Moscow, Russia

Died: June 23, 1973

Lyapunov was a pioneering cybernetics researcher in the Soviet Union. In particular, he devised the operational programming method widely used throughout the country, based on the translation of a high-level task description into a language of logical circuits, operators, and conditions.

He actively promoted cybernetics as a subject at a time (the early 1950s) when many governmental elements considered it a dangerous "bourgeois science". Part of this was his publication of translations of foreign authors in the series "Cybernetic collection." In 1961, he founded the department of cybernetics at the Institute of Mathematics of the Siberian Division of the USSR Academy of Sciences.

## The Other Transistor Patent

Oct. 8, 1926

Julius E. Lilienfeld filed a patent for a three-electrode structure using copper-sulfide as a semiconductor material, a device very reminiscent of a field-effect transistor. The patent was granted on Jan. 28, 1930.

Lilienfeld never published anything about his work, and probably never built the device described in his patent; as a consequence his work was largely forgotten. However, when John Bardeen [May 23], Walter Brattain [Feb 10], and William Shockley [Feb 13] tried to patent their transistor design, it was initially rejected because of Lilienfeld's prior work. Their

patent was finally issued on [Oct 3] 1950.



Julius Edgar Lilienfeld, circa 1934.

Also, a Bell Labs patent deposition of the time showed that Shockley and Gerald Pearson had built an operational version of one of Lilienfeld's transistors, but this was never referenced in later papers. In addition, one of Lilienfeld's original designs was built in the 1990s, and produced substantial gain.

## Peter Fromherz

Born: Oct. 8, 1942;

Ludwigshafen am Rhein, Germany

Fromherz works on hybrid brain-semiconductor systems, particularly on how to connect nerve cells and computer chips.

In 1995, Fromherz and Alfred Stett demonstrated how several leech nerve cells embedded on a silicon chip could be stimulated to grow into a network of nerves. This technique was later scaled-up to work with rat nerve cells. Then in 2006 Fromherz's team at the Max Planck Institute for Biochemistry coupled living brain tissue to a chip for the first time, and successfully recorded neural communication.

## Nerd Origins

Oct. 8, 1951

The first published use of the term "nerd" in its modern sense

appeared in today's *Newsweek* magazine. The relevant sentence explains, "In Detroit, someone who once would be called a drip or a square is now, regrettably, a nerd."

One of several learned theories is that this "nerd" originated in the Dr. Seuss' 1950 children's book "If I Ran the Zoo". The narrator declares that if he ran the zoo, he would "sail to Ka-Troo" and collect "a Nerkle, a Nerd and a Seersucker, too!"

J.E. Lighter, the editor of "The Random House Historical Dictionary of American Slang", suggests that Dr. Seuss may have obtained his 'nerd' from 'Mortimer Snerd,' the name of performer Edgar Bergen's slow-witted ventriloquist dummy.

Another theory suggests that "nerd" evolved from "nert", a modification of "nut", a stupid or crazy person, that was common parlance in the 1940s.

For the origins of "geek", see [Feb 20].

## Apple vs. Apple

Oct. 8, 1991

Apple Computer settled the second lawsuit brought against it by Apple Corps, the record label of *The Beatles* [Oct 1; Dec 26], with a payment of \$26.5 million.

The first suit (from 1978) had been decided in 1981 when Apple agreed to stay out of the music business, and had cost them just \$80,000. This second suit was filed in Feb. 1989, after Apple released several computers with MIDI capabilities [Aug 19]. Apple Corps' legal representation suggested during the suit, perhaps as an attempt at jocularly, that Apple Computer should change its name to Banana or Peach if it wanted to continue marketing music products.

The same issue would result in a third lawsuit in Sept. 2003 after Apple announced iTunes [April 28]. Matters were sorted out in

2007, this time with a \$500 million settlement which included Apple purchasing Apple Corps' trademarks. Further problems related to logo infringement were resolved in Oct. 2012.

"We love the Beatles," Steve Jobs [Feb 24] said following the final settlement. An Apple Records lawyer said. "It's been, as they say, a long and winding road."

Two million *Beatles* songs were sold on iTunes in their first week of release in Nov. 2010.

---

## Mortal Kombat

### Oct. 8, 1992

Midway Games released "Mortal Kombat" to arcades across the US. Game development had started in 1991 with a team of just four people: Ed Boon (programming), John Tobias and John Vogel (graphics) and Dan Forden (sound design).

Tobias later said that his inspirations for the game's story and characters came from Chinese mythology and stories about Shaolin monks.



Mortal Kombat arcade game. Photo by Iain. CC BY-SA 2.0.

The game was originally going to feature a digitized version of Jean-Claude Van Damme. When the actor declined the honor, the

developers recruited martial artists from a local club to be the models for Johnny Cage (based on van Damme), Liu Kang (Bruce Lee), Scorpion, Sub-Zero, Raiden, Kano, and Kurtis Stryker. However, focus group feedback revealed that players had a strong interest in seeing a female fighter. As a consequence, Stryker was struck from the team in favor of Sonya Blade, who was modeled on an aerobics instructor.

The game soon became the focus for criticism because of its violence, and the uproar contributed to the creation of the Entertainment Software Rating Board [Sept 16]. Notably when the game was ported to the more child-oriented SNES [Nov 21], the fighters began to sweat copiously when hit, rather than bleed.

"Mortal Kombat" was also made into a successful movie, released on [Aug 18] 1995.

---

## ENIAC Stamps

### Oct. 8, 1996

ENIAC turned 50 on [Feb 14], and today the US Postal Service issued a special 32 cent "Computer Technology" stamp to mark the anniversary. It shows a brain partially covered by small blocks, some of which contain circuit board fragments.

The occasion was marked by a ceremony at the Army's Aberdeen Proving Ground, where the ENIAC had been put to work until [Oct 2] 1955. It was also the first US Stamp dedication to be broadcast live over the Internet's Mbone [June 24]. Stamp collectors in six countries were able to watch in real time.

ENIAC (at least part of it) would next journey into space [March 11].

For more postage stamps, see [April 7, June 30, Nov 11, Dec 11].

---

## Movable Type

### Oct. 8, 2001

Mena and Ben Trott launched "Movable Type", a tool for generating blogs, with an emphasis on website customization which drew a whole new group to the blogging endeavor. The software was written in Perl [Dec 18], and stored content in MySQL [March 3].

At various times, the company behind "Movable Type", Six Apart, maintained three other web blog publishing systems—TypePad, Vox, and LiveJournal [April 15]. While "Movable Type" was installed on a user's own Web server, TypePad, Vox, and LiveJournal were hosted services.

---

## Quantified Self Labs

### Oct. 8, 2007

Quantified Self Labs was founded in California by Gary Wolf and Kevin Kelly [Jan 2] to serve the lifelogging community – individuals who wish to gain enlightenment through technological self-tracking. This requires the gathering of copious data on all aspects of a person's daily life in terms of inputs (food consumed, quality of the surrounding air), states (mood, arousal, blood oxygen levels), and performance, both mental and physical.

---

## Quantum Cryptography Network

### Oct. 8, 2008

The first commercial telecommunications network to secure data with quantum cryptography was demonstrated in Vienna. It was the product of a partnership between 41 organizations from 12 countries

that had been formed back in April 2004.

The network consisted of six nodes and eight intermediary links ranging from 6 to 82 km in length employing a variety of quantum cryptographic technologies.

The world's first quantum cryptography protocol, BB84, had been published by Charles Bennett and Gilles Brassard [Feb 00] way back on Dec. 9, 1984, but previous work had focused on point-to-point connections between one sender and a receiver.

---