June 18th

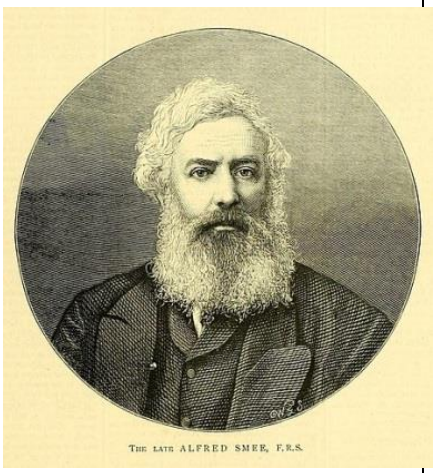
Alfred Smee

Born: June 18, 1818;

Camberwell, London, UK
Died: Jan. 11, 1877

Smee rose to prominence in the 1850's because of his books on a field he called electro-biology, on the relationship between electricity and the function of the human body.

In 1851, Smee moved onto computation, with his text, “Process of Thought Adapted to Words and Language”, where he proposed building an artificial reasoning device that was purported to work in a similar way to the nervous system. His "Relational Machine" would consist of a large piece of sheet metal containing numerous metal hinges. A hinge folded one way would represent the presence of a property, and turned the other way would signal its absence. A companion device, the "Differential Machine", would compare ideas by examining the properties stored in two "Relational Machines", to judge whether the ideas agreed or not.



Alfred Smee, FRS. *Gardeners' Chronicle* 1877.

Smee was confident his machines could model human thought, but was also concerned that a fully functioning machine might “cover an area exceeding probably all of London, and the very attempt to move its respective parts upon each other, would inevitably cause its own destruction.”

Distant Electric Vision

June 18, 1908

The Scottish electrical engineer, Alan Archibald Campbell Swinton, began experimenting with using cathode ray tubes to transmit and receive images in 1903. He first described his approach in a letter published on this day in *Nature*, under the heading “Distant Electric Vision”. Other researchers had already employed tubes as receivers, but using the technology to transmit was novel.

His idea for a fully electronic television system was later popularized by Hugo Gernsback as the “Campbell-Swinton Electronic Scanning System” in the Aug.1915 issue of the popular magazine *Electrical Experimenter*.

Sherry Turkle

Born: June 18, 1948;

New York City

Turkle has written several books on the psychology of human relationships with technology, especially how people relate to computational objects.

In "The Second Self" (1984), Turkle described how computers were becoming part of our social and psychological lives. In "Life on the Screen" (1995), she discussed how emerging technologies, specifically computers, affect the way we think and see ourselves as humans. In "Alone Together" (2011), she considered how society was adapting to mobile technologies, robots, and other electronic gadgets.

Dartmouth AI Workshop

June 18, 1956

On Sept. 2, 1955, John McCarthy [Sept 4], Marvin Minsky [Aug 9], Nathaniel Rochester [Jan 14], and Claude Shannon [April 30] submitted a proposal to the Rockefeller Foundation to fund a workshop on AI at Dartmouth College.

Dartmouth was chosen since McCarthy had recently joined the institution as a young Assistant Professor of Mathematics.

The proposal introduced the term ‘artificial intelligence’, a phrase that McCarthy selected partly for its neutrality. He wanted to avoid automata theory and cybernetics which seemed to focus on analog feedback, and were closely associated with Norbert Wiener [Nov 26].

The first participants (Ray Solomonoff and perhaps Tom Etter) arrived at the “Dartmouth Summer Research Project on Artificial Intelligence” on this day, for a workshop that lasted almost 8 weeks (it ended on Aug. 17).

Eleven mathematicians and scientists were expected to attend, and it's believed that there were at least ten other delegates during some of that time. Unfortunately McCarthy later lost his list of attendees, but an earlier summary contains 47 names. We do know that Gloria Minsky (wife of Marvin) was there, with their part-beagle, Senje, although he didn't take part in any sessions.

Newell and Simon came for a few days to present their Logic Theorist [August 9], and became the stars of the show. Alex Bernstein from IBM presented his prototype chess program, which inspired McCarthy to invent alpha-beta pruning. Minsky described his ideas for a plane geometry theorem prover, which was later developed into the first major AI program by Herbert Gelernter [Dec 17].

The first AI conference (not workshop) in the UK was held on [Nov 24], 1958.

BASIC-86

June 18, 1979

Microsoft released BASIC-86 for the Intel 8086 [June 8].

In the process, Microsoft had formed a relationship with Seattle Computer Products (SCP [May 19]) because of their experience building a board that interfaced an 8086 to the S-100 bus [Aug 28]. This meant that Microsoft knew about SCP's QDOS (Quick and Dirty Operating System) [June 1] which they'd developed because the port of CP/M [June 22] to the 8086 was delayed.

It was QDOS that Microsoft licensed [Sept 22] and eventually bought [July 27] when it was tasked with writing an OS (i.e. MS-DOS) for the IBM PC [Aug 12].

Trans-Siberian Gas Pipeline Explosion

June 18, 1982

A supposed malfunction in the control software for the Trans-Siberian gas pipeline resulted in the largest man-made non-nuclear explosion in history.

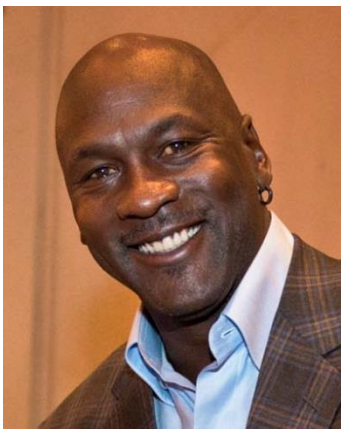
It was soon being alleged that CIA operatives had planted a bug in the Canadian SCADA (Supervisory Control and Data Acquisition) system. However, it seems more likely that the explosion was simply due to human error. There were reports that the software had notified an engineer of a pipeline leak, but he had kept increasing pressure to maintain the flow of gas. A passing train had then sparked the explosion.

The Jordans

June 18th, 2001

Palm [March 10] launched the Jordan m100 and m500 handheld computers, the result of a $3.5 million, three-year deal with basketball star Michael Jordan.

The devices were mostly identical to the usual Palm hardware except for the "Jordan" branding on the case. However, the bundled software included inspirational quotes from Jordan, a trivia game on the basketball star, fitness tips from his personal trainer, and a guide for locating Michael Jordan themed restaurants. Also the Jordans cost more than a standard Palm.



Michael Jordan (2014). Photo from the Defense.gov archive.

For more celebrity Palms, see [Aug 1].

AdSense Released

June 18, 2003

AdSense was Google's first big push into advertising beyond ads that appeared next to Google search results (i.e. Google AdWords [Oct 23]).

The new contextual advert placement software read a webpage and inserted advertisements that were deemed relevant to its content. Google was paid by the advertisers for doing this of course, but also paid the owners of the modified webpages.

It greatly expanded Google's revenue stream. For example in the first quarter of 2014, it contributed 22% to the company's total revenue, amounting to $3.4 billion.

Paul Buchheit, the founder of Gmail [April 1], had the original idea for inserting adverts into email. Susan Wojcicki [July 5], with the backing of Sergey Brin [Aug 21], then organized a team for applying the idea to webpages. This resulted in Google buying "Applied Semantics" in April 2003, which sold a contextual ad product called AdSense.

One unintended result of this new feature in Google search was the appearance of fake AdSense webpages to attract user clicks, filled with random text or content copied from other sites.

$2 Million Sharing Damages

June 18, 2009

In the first Recording Industry Association of America (RIAA) file-sharing case to go to trial, a jury found Jammie Thomas-Rasset liable for $1.92 million in damages for infringing the copyright of 24 songs she shared on Kazaa. This came to $80,000 per song, but did include some good tunes by Aerosmith, Green Day, and Guns N' Roses.

The damages were reduced to $54,000 in January by Judge Michael Davis, who characterized the case's previous verdict as "monstrous and shocking." However, after another appeal in 2012, the damages was increased to $222,000 (a mere $9,250/song).

In March 2013, Thomas-Rasset announced she would declare bankruptcy to avoid paying RIAA. RIAA suggested that it would accept a lower payment if Thomas-Rasset made a video about copyright infringement, which she refused to do.

For more RIAA action, see [Feb 4; Sept 8].

Printing Wikipedia

June 18 - July 2, 2015

The “From Aaaaa! to ZZZap!” exhibition by Michael Mandiberg opened at the Denny Gallery in NYC.

Mandiberg had written software that converted the English-language Wikipedia [Jan 15] into book form, and during the course of the exhibition, he sent them off to the print-on-demand service, Lulu.com.

Mandiberg explained, “Print Wikipedia is both a utilitarian visualization of the largest accumulation of human knowledge and a poetic gesture towards the inhuman scale of big data."

A total of 7,471 volumes, each consisting of 700 pages, were generated, including a 36-volume index of the 7.5 million Wikipedia contributors. Purchasing a complete set would have cost around $500,000, but a single volume was very reasonably priced at $80.

Mandiberg’s efforts weren't entirely new. The Wikimedia Foundation [June 20] had briefly offered a print-on-demand service in conjunction with PediaPress back in 2008.