March 19th

First Movie

March 19, 1895

Auguste and Louis Lumière recorded the first footage using their newly patented cinematograph, a competing device to Thomas Edison's [Feb 11] kinetoscope [May 20].

The cinematograph weighed 16 lbs. and was operated by a hand crank, unlike the kinetoscope that was barely portable. Also, the cinematograph could serve both as a film projector and developer.

The film, "La Sortie des usines Lumière à Lyon" (Workers leaving the Lumière Factory in Lyon), was 46-seconds long, and is often considered the first motion picture ever made.

There are three versions, often referred to as the "one horse," "two horses," and "no horse" variants, in reference to a horse-drawn carriage that appears in the first two (pulled by a single horse in the original and two horses in the remake).

By 1900, the Lumière brothers had produced 1,299 short movies, but this particular film was forgotten for almost 90 years until its rediscovery in Lyon in 1985.

Julian Himely Bigelow

Born: March 19, 1913; Nutley, New Jersey

Died: Feb. 17, 2003

Arturo Rosenblueth, Norbert Wiener [Nov 26], and Bigelow wrote one of the founding papers on cybernetics: "Behavior, Purpose and Teleology," (1943) on how mechanical, biological, and electronic systems could communicate and interact, which inspired the formation of both the "Teleological Society" and its Macy Conferences [March 21].

Bigelow had first met Wiener during WWII when they collaborated on the development of anti-aircraft fire control devices.

Julian Bigelow. Photo by Ibigelow. CC BY-SA 3.0.

On Wiener's recommendation, John von Neumann [Dec 28] hired Bigelow in 1946 to help build his IAS machine [June 10]. Bigelow was also the chief engineer for the MANIAC [two entries forward], one of the around fifteen machines heavily indebted to the IAS design.

During the IAS's construction, Bigelow stored surplus electronics equipment in a barn in Princeton. Historian George Dyson grew up nearby, and visited the storehouse often. In 2012, Dyson published "Turing's Cathedral", about the early days of computing, and described Bigelow as "the missing link" between computing's engineers and its theoreticians.

Allen Newell

Born: March 19, 1927; San Francisco, California

Died: July 19, 1992

Newell worked at RAND Corporation [Oct 1] in the 1950's in the areas of AI and cognitive psychology, much of his research carried out jointly with his long-time associate Herbert Simon [June 15].

Newell and Simon were responsible for the Logic Theorist [Aug 9] and the General Problem Solver [Dec 30], both developed using the Information Processing Language [Feb 26] created by Newell, J. Clifford Shaw [Feb 23], and Simon.

In the 1980's, Newell's interests centered around SOAR, a cognitive software system capable of solving problems and learning in ways similar to human beings.

After WWII, Newell studied at Stanford, where he took several courses run by George Pólya, one of the leading exponents of heuristic problem-solving in math (explained best in Pólya's classic 1945 text, "How to Solve It"). But it was only after attending a 1954 RAND seminar by Oliver Selfridge [May 10] that Newell had a "conversion experience": the revelation that computers could simulate human problem-solving.

MANIAC Runs

March 15, 1952

The MANIAC (Mathematical Analyzer, Numerical Integrator, and Computer), one of the many 'offspring' of John von Neumann's IAS computer [June 10], became operational at the Los Alamos National Lab in New Mexico. It used 2500 vacuum tubes and 800 germanium diodes. The project was led by Nicholas Metropolis [June 11], with chief engineer Julian Bigelow [two entries back].

Metropolis chose the MANIAC name in the (vain) hope of halting the rash of silly acronyms for computers; von Neumann may have suggested it to him.

In 1953 and 1954, MANIAC performed analyses that helped reveal the existence of the sub-atomic Delta particle. Noted mathematician (and cartoonist) George Gamow used it for early research into genetics, and refered to the MANIAC in one of his delightful Mr. Tompkins

books: “Mr. Tompkins Learns the Facts of Life” (1953).

The MANIAC was home to the first chess program to beat a human being, written in 1956 by a group including Stanislaw Ulam [April 13]. However, due to a lack of computing power, the software only supported a 6 x 6 board, lacked bishops, double-steps for pawns, and castling. This version was later christened "Los Alamos Chess".

Edward Teller (“the father of the hydrogen bomb”) gave a talk about the machine in 1953. Unfortunately (but perhaps accurately), the event's notice announced:

Edward Teller The MANIAC

The MANIAC II succeeded the MANIAC at Los Alamos in 1956, and supported floating-point arithmetic. The MANIAC III, employing solid-state circuitry, was developed at the University of Chicago when Metropolis returned there to head its Institute for Computer Research.

A computer called the MANIAC I was featured in the SF film “The Magnetic Monster” (1953), although it wasn't the actual MANIAC.

Informatics Begins

March 19, 1962

Informatics, Inc. was a software services company, founded by Walter F. Bauer, Werner L. Frank, and Richard H. Hill, that benefited greatly from IBM’s decision in 1969 to unbundle their software from hardware sales [Jan 17]. This suddenly made a company offering software products a viable concern.

During the 1960's, Informatics sold a variety of software, but became best known for its MARK IV file management and report generation product, released in 1968. During its first year, MARK IV garnered orders worth nearly $2 million, and was the first software merchandise to reach cumulative sales of $1 million, $10 million, and $100 million. Its selling point was faster application development, perhaps ten-times faster than building the same system using COBOL [April 8].

A users’ group of MARK IV customers, named the IV League (a play on "Ivy League"), first met in 1969, and by 1972 was attracting up to 750 attendees.

Regina Elvira Dugan

Born: March 19, 1963; New York City

Dugan was the first female director of DARPA [Feb 7] from 2009 to 2012, after 18 male predecessors. She promoted initiatives in cyber security, social media, and advanced manufacturing.

From 2012 to 2016, she led Google’s [Sept 27] Advanced Technology and Products division, which encompassed a range of interests, including clothes with micro-sensors, and digital tattoos. She once described the division as “a band of pirates trying to do epic sh--.”

In 2016, she founded Facebook’s [Feb 4] secretive hardware lab, "Building 8", which includes the company’s brain-computer interface project.

Regina Dugan (2010). Photo by DARPA - US Govt.

The eight in the name represented the number of letters in Facebook, and its physical location was actually in Building 59 on Facebook’s main campus in Menlo Park.

Unfortunately, Building 8 became something of a costly failure, and Dugan was gone in less than two years. It's most visible product was Portal, a video-chat product which failed to gain much market traction.

Dugan has commented on the low percentage of women in high-tech jobs: “If you’re a woman in tech, 41 percent of you will drop out five to 10 years after graduation. You can’t fill a talent pipeline with a leaky bucket.”

Sim-One

March 19, 1967

A press release announced the Sim-One, the first realistic anesthesia simulator – a 6-foot, 195-pound mannequin – based on work by J.S. Denson and Stephen Abrahamson at the University of Southern California.

An attached computer calculated the mannequin's response to injected drugs and to anesthetic gases, and Abrahamson predicted that a fully functional “whole unconscious form” would be available in another seven years.

Subsequently, the Sim-One was used mainly for endotracheal intubation training – how to slip a tube down a person's windpipe without causing damage.

Don Carter of Sierra Engineering Co., which built the Sim-One, also constructed "Sierra Sam" and "Sierra Sue", crash-test dummies used in automobile and aerospace research.

Macintosh IIfx Released

March 19, 1990

The “wicked fast” 40 MHz Apple Mac IIfx became the Mac of choice for graphic designers,

offering nearly three times the performance of the IIx [Sept 19].

Apple also hoped the IIfx might become a contender in the workstation market, but the top-of-the-line machines made by Sun [July 00], HP, and Apollo [Feb 13] were faster. The other problem was the price ($10,000 to $12,000), which led some to interpret “fx” as meaning "F**king eXpensive".

The “Wicked Fast” label was the idea of product manager Frank Casanova who had once worked in Boston where the term “wicked” was a common form of slang.

The Mac IIfx was the last Apple computer to use the “Snow White” design, first seen on the Apple IIc [April 24] back in 1984.

Witty Worm Attacks

March 19, 2004; 8.45pm PST

The Witty worm began infecting computers using Internet Security Systems products such as BlackICE and RealSecure Desktop. Within half an hour, over 12,000 computers had been affected, and 90GB/s of Internet traffic was generated as a side-effect. The worm overwrote random segments of each machine's hard drive, generally rendering them inoperable.

Witty was the first worm to hitch itself to network security software, and notable for being launched simultaneously from 110 hosts. It must have been put together very quickly, since it was released just one day after the publication of the buffer overflow vulnerability that it utilized.

The worm was named after a snippet of text in its code that read, “(·) insert witty message here (·)”.

AWS

March 19, 2006

Amazon Web Services (AWS) provides cloud computing infrastructure-as-a-service. Its numerous services (2000+) include storage, databases, analytics, networking, IoT [Sept 21], security, and enterprise applications. However, when it was launched on this day, it offered just three: Simple Storage Service, Simple Queue Service, and Elastic Compute Cloud [Aug 25].

Today AWS dominates the cloud infrastructure market, earning more than its three closest rivals – Microsoft Azure [Feb 1], IBM Cloud, and Google Cloud – combined.

Although today is used to mark AWS' launch, an earlier incarnation had been released on Nov. 9, 2004, as Amazon.com Web Services. It functioned as a collection of APIs and tools to access the Amazon.com catalog. Its development team, a mere 60 people, was led by Andrew Jassy.

Prior to being appointed head of AWS, Jassy spent 18 month as a technical assistant to Jeff Bezos [Jan 12]. Jassy later defined it as: “A ’shadow role.’ And it really was like being Jeff’s shadow – I participated in all of his meetings, including his one-on-ones.”

Part of the AWS management culture includes a weekly “ugliest shirt” competition, held on Wednesdays, and being an active participant in Amazon’s buffalo wing eating club, Tatonka.

justin.tv is On

March 19, 2007

(midnight)

justin.tv started out as a video streaming channel featuring Justin Kan who broadcast his life 24/7, and popularized the term "lifecasting" in the process. He wore a baseball cap with an attached webcam and transmitted the stream via a laptop-in-a-backpack system designed by the site's co-founder Kyle Vogt.

Kan became the target of several pranks. On March 21, 2007, someone called the San Francisco Police Department and filed a false report about a stabbing in Kan’s apartment. The following day, someone reported a fire. Kan responded by changing his phone number.

After eight months, Kan stopped broadcasting, and justin.tv relaunched as a collection of user-generated streaming channels including Social, Tech, Sports, Entertainment, News & Events, and Gaming. The Gaming stream quickly became the most popular, and was spun off as Twitch in June 2011. The name was inspired by the term “twitch gameplay” – a test of a gamer’s response time.

Justin Kan (2007). Photo by Josh Hallett. CC BY-SA 2.0.

In Aug. 2014, justin.tv shut down, but Twitch was acquired by Amazon.com for $970 million. As of May 2018, it had 2.2 million broadcasters monthly and 15 million daily active users.

The first lifecaster was Steve Mann [June 8], although JenniCam [April 14] was the first really popular attempt. A famously disastrous lifecasting experiment was “Quiet: We Live in Public” [Dec 3].

Arguably, lifecasting as become mainstream with the rise of social networking, and apps like Instagram [Oct 6] and Snapchat [July 8].