Margaret Hamilton prints out the complete source code of her program. The stack of code matches her own height.

1969 : Apollo

Margaret Hamilton was Director of the software team that wrote the code for the Apollo 11 lunar lander.

Linus Torvalds publishes code for the Linux kernel in an online newsgroup.

1991 : Linux

The Linux kernel rapidly gained users and developers. In 2020, it consisted of more than 27 million lines of code.

The team of Grace Hopper finds a bug in the Mark II computer at Harvard University.

1947 : First Bug

Grace Hopper made computing history by developing the COBOL language. The bug was a moth, it became famous as the first insect found in a computer.

Guido van Rossum creates a programming language, "a 'hobby' programming project that would keep [him] occupied during the week around Christmas".

1989: Python

Guido creates the Python language at the CWI in the Netherlands. Around 30 years later, Python became the most frequently used language on the planet.

Unix computers start counting time in seconds until today.

1970: Unix Epoch

Midnight of January 1st, 1970 is known as the Unix Epoch. With a 32-bit integer there are enough seconds left until 2038. The first algorithm, a program to calculate Bernoulli numbers, is published.

1843: First Program

Ada Lovelace wrote the algorithm that is considered as the first computer program, a remarkable achievement, considering she did not have a computer at the time.

Linear Regression is used to fit a straight line to a set of points.

1805: Linear Regression

Adrien-Marie Legendre was the first to publish the least squares approach, although Carl Friedrich Gauss had discovered it independently a few years earlier. Linear Regression is one of the most fundamental Machine Learning methods.

A robot plays 12 different songs on the flute.

1737: Robot Shepherd

The inventor Jacques de Vaucanson constructed the figure of a shepherd that played the flute according to mechanically programmed instructions. His masterpiece is considered the "Digesting Duck".

A computer beats the world champion in chess.

1997: Deep Blue

The Deep Blue computer built by IBM beats world champion Kasparov 2:1 with 3 draws. It took 700,000 grandmaster games and evaluation of 200 million positions per second.

An artificial neural network is trained to learn the structure of a family tree.

1982: Backpropagation

David Rumelhart, Geoffrey Hinton and Ronald Williams publish the backpropagation algorithm. Their paper is among the most fundamental breakthroughs of machine learning and practically all modern neural networks are based on the same approach.

The first pedestrian is killed by a self-driving car.

2018: Uber Accident

Elaine Herzberg was hit by a self-driving Uber vehicle while crossing a four-lane road. To be fair, there are not enough fatal accidents to establish with confidence whether self-driving cars are better drivers than humans.

A test to distinguish an artificial intelligence from a person is described.

1950: Turing Test

In "Computing Machinery and Intelligence" Alan Turing describes what later became known as the Turing Test. The paper contains the following example dialog:

Q: Please write me a sonnet on the subject of the Forth Bridge.

A: Count me out on this one. I never could write poetry.

Q: Add 34957 to 70764.

A: (Pause about 30 seconds and then give as answer) 105621.

Q: Do you play chess?

A: Yes.

The oldest member in the Robot Hall of Fame by Carnegie Mellon University is created.

1927: Metropolis

The android Maria appears in the Fritz Lang sci-fi movie "Metropolis". It has its own statue in the Carnegie museum in Pittsburgh.

Two robots present the Oscars at the Academy Award ceremony in the category "Special Achievement Award".

1978: Star Wars

The Oscars for special achievements were presented by R2-D2, C3PO and Mark Hamill (Luke Skywalker). The recipients were Ben Burtt (Star Wars) and Frank Warner (Close Encounters of the Third Kind).

Amazon is convicted to pay a 746 million € fine for placing browser cookies on their website.

2021 : Cookie Case

The verdict against Amazon puts the European data privacy act GDPR into practice. The court case is ongoing.

Microsoft switches off its chatbot after only 16 hours.

2016: Chatbot Tay

After posting 95000 messages on Twitter, the chatbot Tay had learned from its users to send out racist, sexist and abusive messages that it had to be taken offline.

The sci-fi author Isaac Asimov writes down fundamental laws to guide the actions of robots.

1942: Laws of Robotics

The "Laws of Robotics" by Isaac Asimov are as follows:

- 1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
- 2. A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
- 3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

Netflix awards a 1 million USD prize for the best recommendation engine.

2009: Netflix Prize

The Netflix Prize is considered a significant event because it propagated breakthroughs in recommendation algorithms. The training data consisted of 100 million user ratings.

The first version of Microsoft Word is released.

1983: MS Word

Microsoft publishes "Multi-Tool Word" with many innovations that few programs had at the time: making text bold, italic or underline, an undo function and controlling the application with a mouse! The internet connects 15 computers.

1971: Internet

ARPANET, an early research network at universities in California and Utah quickly grew exponentially into the internet we know today and is growing still. The browser-based world wide web did not exist until 1990.

A man is convicted to a four-month jail sentence for playing Tetris.

2002 : Tetris

Faiz Chopdat from Blackburn, Lancashire was playing Tetris on his mobile while on a plane and refused to switch off the phone when instructed by the cabin crew. It was high score or flight safety.