

# The History of Computers

## ENIAC

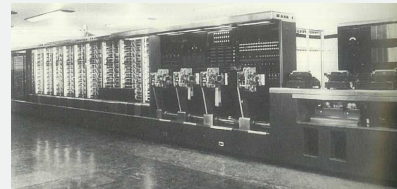
Through funding from the U.S. Army, J. Presper Eckert and John Mauchly created the world's first all-electronic general purpose digital computer, the ENIAC. The ENIAC computed artillery firing tables, weather predictions, atomic calculations, cosmic ray studies, wind tunnel design, and many other scientific uses. This invention lead Eckert and Mauchly to later produce the first commercially available computer, the UNIVAC.



(Augarten, 1984)

## Harvard Mark 1

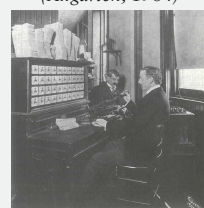
Howard Aiken designed the Harvard Mark 1 to automate the labour of solving numerical equations. This was the first computer that could be programmed, as opposed to solving one fixed algorithm. The computer was used in calculating missile trajectories and was also used in the Manhattan Project for producing the atomic bomb.



(Augarten, 1984)

## Tabulating Machine

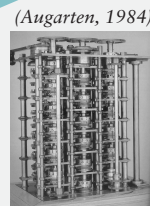
Herman Hollerith designed the Tabulating Machine to automate the processing of census data through the use of paper punch cards. This impressive invention streamlined an otherwise overwhelming task, and eventually caught the attention of Thomas J. Watson, leading to the formation of the Computing-Tabulating-Recording Company, subsequently known as IBM.



(Augarten, 1984)

## Difference Engine

Charles Babbage, the father of the computer, envisioned a machine capable of computing polynomial functions that when performed by hand were time consuming, tedious, and error prone. He built a small prototype but never completed the machine in its entirety before pursuing his next invention, the Analytic Engine.



(Augarten, 1984)

## Systems 360

IBM's System 360 was led by Chief Architect Gene Amdahl. The Solid Logic Technology enabled the computers to be compact. The modular designs allowed for flexible compatibility of various machines under one cohesive platform.

(Cambpbell-Kelly, Aspray 1996)



(Cambpbell-Kelly, Aspray 1996)

## Xerox Alto

Designed by Charles Thacker, the Xerox Alto and was the first computer with a Graphical User Interface and a mouse. Despite its accomplishments, Xerox did not produce it commercially, as their was no PC market, yet.

(Smithsonian, 1973)



## Apple 2

Inspired by the success of the first personal computer, the Altair 8800, Steve Wozniak and Steve Jobs designed the first commercially successful PC for everyday people, proving the market viability of PC's. The Apple 2 standardised the design of a PC, equipped with a keyboard for input and the video display for output.

(Cambpbell-Kelly, Aspray 1996)



(Computer History Museum, n.d.)

## Osborne 1

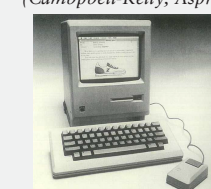
The Osborne 1, developed by Adam Osborne and designed by Lee Felsentein, was the first commercially successful portable computer. This concept is the inspiration behind the current-day laptop design. Osborne's success was short-lived, but the innovation of the Osborne 1 progressed the market opportunity of integrating computers into everyday life and work.



(Computer History Museum, n.d.)

## Apple Macintosh

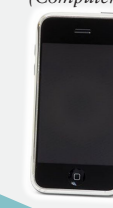
Steve Jobs landed a deal with Xerox to gain access to their technology, and the result was the Apple Macintosh being the first commercially available personal computer to implement a graphical user-interface and mouse, creating a newfound ease of use in computing that would go unrivalled for many years. This would solidify the design and functionality of modern-day PC's.



(Cambpbell-Kelly, Aspray 1996)

## Apple Iphone

Steve Jobs combined the design of the iPod with touchscreen functionality and a user interface that enabled the user to access an infinite number of interfaces and applications. The iPhone was the most successful personal computer that fit in your pocket, that was also capable of making phone calls and sending text messages. Virtually every smartphone today replicates the original iPhone design.



(Computer History Museum, n.d.)

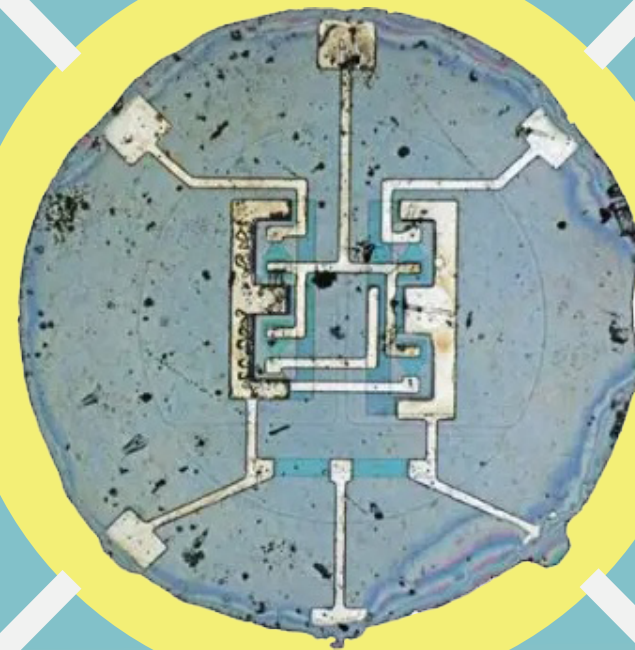
## Apple Watch

Jony Ive led the design of the Apple Watch, pioneering the most popular wearable computer. The sensors built-in to the device provided a new level of interconnection between human health and technology. The Apple Watch has proven the market for wearable technology which is soon to be paired with other devices in the future, such as Apple Glasses.

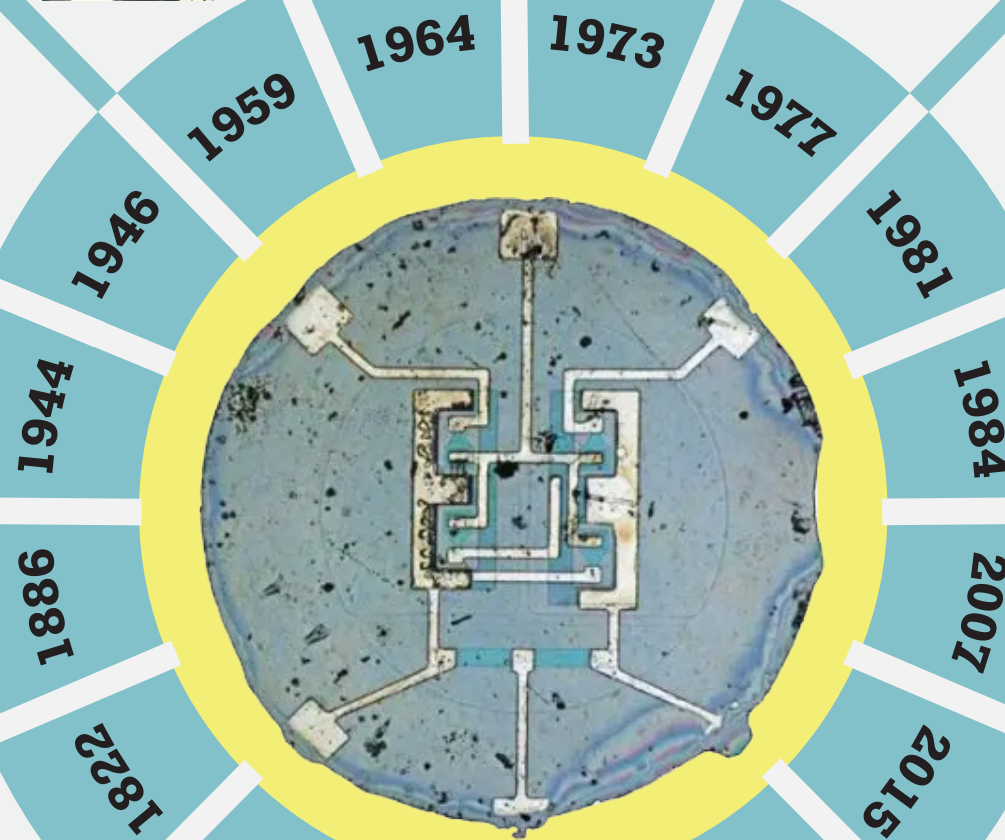


(Computer History Museum, n.d.)

Computers have played a significant role in shaping the world we live in today. Their invention and evolution have led to numerous advancements in fields such as science, medicine, and technology. The history of computers can be traced back to the 19th century, however, it wasn't until the 20th century that computers truly began to revolutionise the way we live and work. The invention of the electronic computer in the 1940s marked the start of the computer age. As technology continued to advance, computers became smaller, faster, and more affordable. This led to their widespread adoption in businesses, homes, and schools. With the arrival of the internet, computers became an integral part of our daily lives, connecting us to the rest of the world and providing access to a vast amount of information. Computers continually play a crucial role in virtually every industry, helping to increase efficiency and productivity. The perpetual development of innovations in technology will continue to empower designers to create and invent new products, leaving the world in astonishment of what is possible through the abstraction of processing electrical signals as 1's and 0's. Computers have changed the world in ways that were once unimaginable and will continue to shape our future.



(Augarten, 1984)



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