Alan Turing, well known as one of the greatest mathematical minds of the 20th century and is often referred as “the pioneer of computer science.” He was born on June 23, 1912 in Maida Vale, London where he spent his childhood studying at St. Michael’s elementary School and Sherbourne in Dorset. His father was in the Indian Civil Service. Turing’s parents lived in India until his father’s retirement in 1926. Alan and his brother stayed with friends and relatives while studies were on-going. Displaying a remarkable talent at school for math and sciences, peers and teachers were quite aware of how intelligent Turing was. A previous math teacher of his, Mr. Randolph described him as “a clever young man, who has a bright future ahead of him.”

In 1931, Turing’s gift helped him achieve a scholarship at Cambridge University, enrolling in the studies of mathematics. After he graduated in 1934, Alan began to work in the burgeoning world of quantum mechanics. In 1936, Turing wrote a article piece “On Computable Numbers With An Application to the Entscheidungsproblem.” The significance behind this would present the notion of a universal machine; Turing Machine. It was capable of computing anything that is computable (a machine that could do each type of calculation on numbers and symbols).

Two years later, Turing studied mathematics and cryptology at Princeton, New Jersey. By 1938, he received his Ph.D. from Princeton University and immediately pursued a part-time position with a British code-breaking organization, “The Government Code and Cypher School.” His role was to decipher messages encrypted by the German Enigma machine, which provided vital intelligence for the allies. He took the lead in a team that designed a machine known as a bombe that successfully decoded German messages. He became a well-known figure at Bletchley.

Near the 1940s, Turing went on to hold high-ranking positions in the mathematics department and later the computing laboratory at the University of Manchester. He first addressed the issue of artificial intelligence in his 1950 paper, "Computing machinery and intelligence," and proposed an experiment known as the “Turing Test”—an effort to create an intelligence design standard for the tech industry. Over the past several decades, the test has significantly influenced debates over artificial intelligence

In the early 1950s, homosexuality was illegal in the United Kingdom. Unfortunate for Turing, he experienced a house break-in and called the police. In that same moment, he admitted to them that he had a sexual relationship with the perpetrator, 19-year old Arnold Murray. Shortly after, Turing was arrested and charged with gross indecency. Turing’s security clearance was removed and he was laid-off from any future partnership/projects.

Turing died on June 7, 1954. By observation, it was determined the cause of death was cyanide poisoning. The evidence was found only a few feet away – the remains of an apple. Years to come, Turing continues to be honoured. Time magazine named him one of its "100 Most Important People of the 20th century," saying, "The fact remains that everyone who taps at a keyboard, opening a spreadsheet or a word-processing program, is working on an incarnation of a Turing machine. “ Alan is a remarkable scientist of the 20th century and will forever be recognized for his impact on computer science, with many crediting him as the "founder" of the field.

Source : <https://www.biography.com/people/alan-turing-9512017>

<https://www.turing.org.uk/>

<https://www.turing.org.uk/publications/dnb.html>