TURING, Alan Mathison (1912-1954)`

Alan Mathison Turing is known as the father of modern computer science. Of his early achievements he helped to bring the Second World War to a close by deciphering the Nazi’s encryption machine, Enigma. As an undergraduate, Turing developed a new proof of the Central Limit Theorem. This led to graduate work at King’s College, where he wrote what may be his most important work, the 1936 paper entitled “On Computable Numbers, with an application to the Entscheidungsproblem.” In this paper, Turing answered the problem posed by German Mathematician David Hilbert in 1928 calling for a proof of a *decision procedure*. His approach to this proof led to the concept of what is now known as Turing Machines. Turing’s description of these hypothetical machines, which showed that there was no possible decision procedure, became the foundation of the theory of computation and computability. After the war, Turing took up at the National Physical Laboratory in London, and worked on a project to create the first computer, devising the idea of internal storage in the process. In 1952 Turing was arrested for acts of “gross indecency” for participating in a same-sex relationship and, after being convicted, Turing chose to undergo estrogen therapy rather than submit to a two-year prison sentence. Suffering from severe depression due to the treatment, Turing committed suicide in 1954. It was not until 2013 that Turing was issued a posthumous royal pardon by the British Government for his conviction.

Bibliography: <http://www.turing.org.uk/sources/biblio.html>

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