

Final year project submission

Name: Joshua Baharvand

Title: The Genius of Alan Turing and his influences on the future of Computing Mathematics

Staff: N/A

For my final year project I would like to do a study about Alan Turing, as well as how his work affected mathematics in the next 50+ years, this also includes most of his life experience.

I would like to firstly write a lengthy report on his life and his experiences especially during the Second World War, this includes his younger life and how he studied his craft and who were his teachers. I would be also mentioning, any stories or fictional art created about Alan Turing, this includes films and books. So that we can see how he was thought of by the public in the past and now in the present. Most importantly I would go into lengthy detail about his exploits in the Second World War and how he cracked the Germans code, the machine he created and how much of an innovation it was. As well as all of this, I would finally be discussing his life after the war, and how he was treated due to his sexuality and analyse how it may have been different if he were born 50 years into the future.

The report would also contain a second section which would be about how his work affected the next generation of maths. The Turing machine is still talked about today by computing mathematicians, and I would like to study how this machine and the rest of Turing's work affected how we study maths today and how those in the late 20th century also learned.

I would also like to study the Turing machine itself, try and recreate a basic model of it, and analyse its structure in detail. I would be writing a section solely based on the machine and this would include the more computing and mathematics based report, in which I would be looking more into the computing elements.