



Super Curriculum

A-Level Computing

Read	Do	Find
'Computational Fairy Tales' by Jeremy Kubica; CreateSpace, 2012. A romp through the principles of computational thinking, illustrating high-level computer science concepts, the motivation behind them, and their application via the medium of a fairy tale.	Complete a course of your choice from the computing section of Future Learn https://www.futurelearn.com/subjects/it-and-computer-science-courses	'Carr argues, very convincingly, that automation is eroding our memory while simultaneously creating a complacency within us that will diminish our ability to gain new skills ...' Find out Who Nicolas Carr is and why he holds this view.
The A-Z of AI - Computational Thinking by Jeannette Wing of Carnegie-Mellon University - It represents a universally applicable attitude and skill set everyone, not just computer scientists, would be eager to learn and use.	Listen to the Cambridge University Podcast: What is the future of artificial intelligence? https://www.youtube.com/watch?v=0x3sOZemQK8	Find out how computing is used in your chosen career now. How do you think this will change in the future?
'Outnumbered': From Facebook and Google to fake news and filter-bubbles – the algorithms that control our lives by David Sumpter; Bloomsbury Sigma, 2018. An applied mathematician takes a look at what algorithms are doing with our data and how they are changing our lives.	Challenge yourself to solve the problems at Project Euler sign up here https://projecteuler.net/register	Do some research into Bitcoin and find out the answers to these questions: What makes money money? Would you trust a distributed money system? Why allow bitcoin when it can be used by people to buy illegal things? Who should control money?
Computing with Quantum Cats: From Alan Turing to Teleportation: From Colossus to Qubits by John Gribbin; MIT Press, 2015. Pioneering study of the science behind quantum computing and what the new quantum reality will mean for mankind.	Improve your knowledge of Python : https://bratiservice.eu/doc/PythonNotesForProfessionals.pdf	Find out about the LITTLE MAN COMPUTER and follow the tutorial : https://www.vivaxsolutions.com/web/lmc.aspx
Watch The World Brain : https://www.amazon.co.uk/gp/video/detail/B07K5L32PV/ref=atv_d_l_rdr?autoplay=1	Join Hackerrank and start completing the tasks: https://www.hackerrank.com/	Investigate computer science related degrees in the UK and abroad.