




Super Curriculum

A-Level Computing

Read 	Do 	Find 
<p>'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.</p>	<p>Complete a course of your choice from the computing section of Future Learn https://www.futurelearn.com/subjects/it-and-computer-science-courses</p>	<p>'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.</p>
<p>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.</p>	<p>Listen to the Cambridge University Podcast: What is the future of artificial intelligence? https://www.youtube.com/watch?v=0x3sOZemQK8</p>	<p>Find out how computing is used in your chosen career now. How do you think this will change in the future?</p>
<p>'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.</p>	<p>Challenge yourself to solve the problems at Project Euler sign up here https://projecteuler.net/register</p>	<p>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?</p>
<p>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.</p>	<p>Improve your knowledge of Python : https://bratliservice.eu/doc/PythonNotesForProfessionals.pdf</p>	<p>Find out about the LITTLE MAN COMPUTER and follow the tutorial : https://www.vivaxsolutions.com/web/lmc.aspx</p>
<p>Watch The World Brain : https://www.amazon.co.uk/gp/video/detail/B07K5L32PV/ref=atv_d_l_rdr?autoplay=1</p>	<p>Join Hackerrank and start completing the tasks: https://www.hackerrank.com/</p>	<p>Investigate computer science related degrees in the UK and abroad.</p>