

# A-Level Computer Science & Gaming Super Curricular Activities

	Taster Events and Online Webinars / Lectures/MOOcs
2 <sup>nd</sup> – 6 <sup>th</sup> August	Online Courses in electronics, computer science and electronic engineering  – University of Southampton  For info and booking
	Future Learn MOOCs
On Demand	Computer Programming for Everyone
	How to start your career in game development
	<u>Digital Mobile Skills</u>

# Websites

Pixar – Computing Website – a behind the scenes look at their use of computing

Staircase 12 - Computer Science

<u>Sparknotes</u> - Computer Science a breakdown of sorting, searching, and other fundamentals of computer programming.

### Oxford Research:

Securing the internet of the future

Putting out 'Digital Wildfires' before they take hold

The friendly face of robots

Safety by design

Computers at the heart of the matter



### Podcasts & Videos

Oxford Research videos:

60 Years of Computer Science

Oxford and Cybersecurity 1 – the Internet and Policy

Oxford and Cybersecurity 2 – Trusted Computing

Oxford and Cybersecurity 3 – The Academic Edge

## **Additional Reading**

The Information: A History, a Theory, a Flood by James Gleick. ISBN: 978-0007225736 - a chronicle that shows how information has become "the modern era's defining quality - the blood, the fuel, the vital principle of our world."

The Pattern on the Stone: The simple ideas that make computers work by Daniel Hillis. ISBN: 978-0465025961 – explains basic concepts of the computer in every day language.

Outnumbered: From Facebook and Google to fake news and filter-bubbles – the algorithms that control our lives by David Sumpter. ISBN: 978-1472947413. An applied mathematician takes a look at what algorithms are doing with our data and how they are changing our lives

Computer Science: An Overview by J. Glenn Brookshear. ISBN: 978-0321544285 - overview of what computer science is all about: each topic is presented with its historical perspective, current state, and future potential, as well as ethical issues.

AI: Its Nature and Future by Margaret A Boden. ISBN: 978-0198777984. "...reviews the philosophical and technological challenges raised by Artificial Intelligence, considering whether programs could ever be really intelligent, creative or even conscious, and shows how the pursuit of Artificial Intelligence has helped us to appreciate how human and animal minds are possible."

The Pleasures of Counting by Tom Kôrner. ISBN: 978-0521568234 - puts Maths into the context of how it is used to solve real-world problems.

