



COMPUTING

Read

- 'The Innovators' (Isaacson, W. 2014) - How a group of inventors, hackers, geniuses and geeks created the Digital Revolution. What talents allowed certain inventors and entrepreneurs to turn their disruptive ideas into realities? What led to their creative leaps? Why did some succeed and others fail?
- 'Information: A History, a Theory, a Flood' (Gleick, J. 2011) - We live in the information age but every era of history has had its own information revolution: the invention of writing, the composition of dictionaries, the creation of the charts that made navigation possible, the discovery of the electronic signal, the cracking of the genetic code.
- 'Neuromancer' (Gibson, W. 1984) – The go-to book the technology aesthetic has been based on.
- 'The GCHQ Puzzle Book' (2016) - Why not pit your wits against the people who cracked the Enigma? This book will have you scratching your head for hours trying to solve some challenging problems.

Watch

- 'Snowden' (2016) - Snowden is a biographical crime drama about Edward Snowden and the NSA's illegal surveillance techniques he leaked to the world.
- 'The Social Network' (2010) – This film recreates the controversial story of Harvard student Mark Zuckerberg as he creates Facebook
- 'The Imitation Game' (2014) This film tells the true story of Alan Turing, a mathematical genius who invented the computer whilst trying to crack the German Enigma code during World War II.
- 'The Matrix' (1999) - Topping our list of the best computer science-themed movies is The Matrix. This classic film follows Neo, a computer hacker who follows a beautiful stranger into a forbidding underworld only to find out that the world he knows is actually “an elaborate deception of an evil cyber-intelligence.”

Websites

- [OpenAI API](#) - the worlds first free AI, read and get started here.
- [Lobe | Machine Learning Made Easy](#) Train your computer to recognise images with this free AI.
- [Computer Science Newbies \(csnewbs.com\)](#) Excellent course website with content and theory
- [About - Project Euler](#) Try and solve coding problems

Subscriptions

Remember that if you have been accepted onto the 16-19 Bursary, Thirsk Sixth Form College can support you with academic subscriptions

Listen

- [Rabbit Hole on Apple Podcasts](#) Rabbit Hole - What is the internet doing to us? It's a question we probably never really stop to consider, but is something which we should probably take more time to think about. After all, the internet really has changed the way we carry out even our most innate behaviours: communication, doing calculations, and even ordering food.
- [Spark with Nora Young | Live Radio | CBC Listen](#) Nora Young helps you navigate your digital life by connecting you to fresh ideas in surprising ways

Visit

- The National Museum of Computing
- Bletchley Park
- LEGOLAND® Windsor Resort
- Air Radar Defence Museum, Norfolk
- Hursley Park, Hampshire

Courses

- **Python** - Develop your Python programming skills by challenging yourself to complete as many tasks on Snakify as you can. <https://snakify.org/en/>

Competitions

- [Astro Pi](#) – send your code to space
- [Cipher Challenge](#) - use code to break codes
- [British Information Olympiad](#) – Write code to solve problems

- **Computer Science Fundamentals** - A collection of interactive quizzes that will help you master computer science fundamentals. <https://brilliant.org/courses/computer-science-essentials/>
- **Learn to code**, any language - <https://www.codecademy.com/>

If you are a Bursary student, remember that the Student Discretionary Bursary can pay for certification or courses.

Apps

- **Sololearn: Learn to Code** - SoloLearn is a programming language learning app available for a variety of platforms. Over twenty-two million learners worldwide use the SoloLearn apps to enhance their programming and coding knowledge.
- **Computer Dictionary by Farlex** gives you instant access to more than 29,000 computing terms and 5,000 images, all from authoritative sources, including the Computer Desktop Encyclopaedia and the Free Online Dictionary of Computing. Plus, more than 14,000 entries available anytime offline
- **Typesy** is an easy-to-use typing app to improve typing speed and accuracy, or reduce RSI. Typesy combines detailed video tutorials, scientifically designed typing exercises, and fun games to keep students motivated. Typesy is available for free to download from the App store for iOS (iPad and iPhone) and for Mac desktop computers and MacBooks.

Work experience ideas

- School ICT department
- JML Software Solutions
- NYCC IT support department