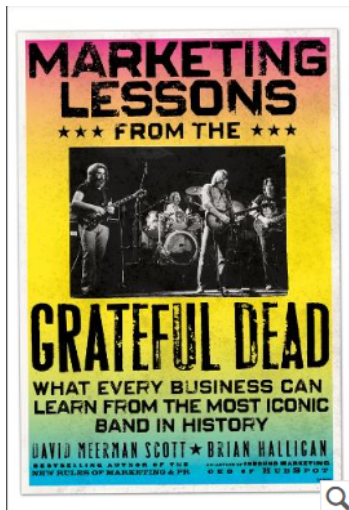
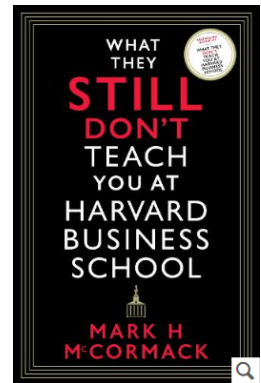


## Wider Reading Examples

### Computer Science and Business

What they still don't teach you at Harvard Business School by Mark H. McCormack

*Between the theories of business school and the real world of business, there is still a gap - one that can only be filled by experience, helped by the knowledge of someone who has already done it. Over a lifetime as one of the world's most influential business leaders, Mark McCormack gathered more insights than could ever fit in one book: here he has distilled the strategies, techniques and wisdom that everyone needs to get organised, get ahead and gain and keep the competitive edge. Building on from What They Don't Teach You At Harvard Business School, this straight-talking, practical guide offers essential tools and skills - from negotiating to managing, advancing your career to building a new idea - that will help you be a leader at any level.*



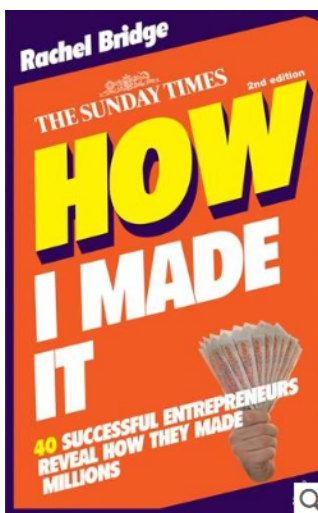
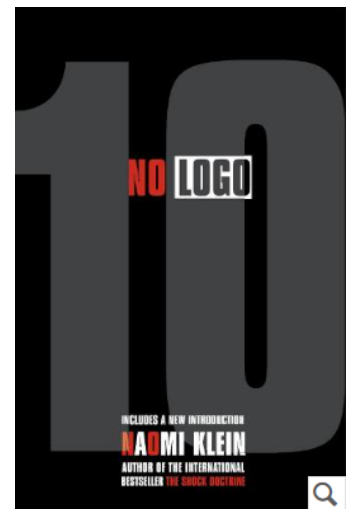
Marketing lessons from the Grateful Dead: What Every Business Can Learn from the Most Iconic Band in History by David Meerman Scott and Brian Halligan

*The Grateful Dead-rock legends, marketing pioneers The Grateful Dead broke almost every rule in the music industry book. They encouraged their fans to record shows and trade tapes; they built a mailing list and sold concert tickets directly to fans; and they built their business model on live concerts, not album sales. By cultivating a dedicated, active community, collaborating with their audience to co-create the Deadhead lifestyle, and giving away "freemium" content, the Dead pioneered many social media and inbound marketing concepts successfully used by businesses across all industries today. Written by marketing gurus and lifelong Deadheads David Meerman Scott and Brian Halligan, Marketing Lessons from the Grateful Dead gives you key innovations from the Dead's approach you can apply to your business. Find out how to make your fans equal partners in your journey, "lose control" to win, create passionate loyalty, and experience the kind of marketing gains that will not fade away!*

No Logo by Naomi Klein

*By the time you're twenty-one, you'll have seen or heard a million advertisements. But you won't be happier for it.*

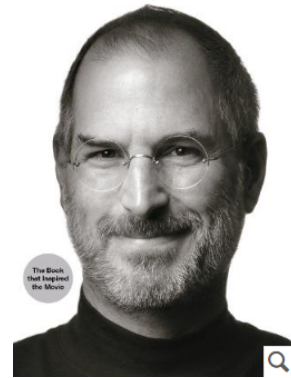
*This is a book about that much-maligned, much-misunderstood generation coming up behind the slackers, who are being intelligent and active about the world in which they find themselves. It is a world in which all that is 'alternative' is sold, where any innovation or subversion is immediately adopted by un-radical, faceless corporations. But, gradually, tentatively, a new generation is beginning to fight consumerism with its own best weapons; and it is the first skirmishes in this war that this abrasively intelligent book documents brilliantly.*



How I Made It: 40 Successful Entrepreneurs Reveal How they Made Millions by Rachel Bridge

*Every year thousands of hopeful entrepreneurs decide to take the plunge. Many fail, but many go on to achieve great success and huge profits. In How I Made It 40 successful entrepreneurs explain how they managed to defy the odds and turn their dreams into reality. Find out how they decided what to do, how they got started and how they found the money they needed. But they also reveal how they had doubts, made stupid mistakes, and encountered overwhelming frustrations along the way. This second edition updates their stories to reveal what happened next and how, in most cases, they finally sold their businesses and made millions. Gutsy, inspiring, and life affirming - if you have ever dreamt of starting up your own business How I Made It is for you.*

Steve Jobs  
by Walter Isaacson



## Steve Jobs by Walter Isaacson

Walter Isaacson tells the story of the rollercoaster life and searingly intense personality of a creative entrepreneur whose passion for perfection and ferocious drive revolutionised six industries: personal computers, animated movies, music, phones, tablet computing, and digital publishing.

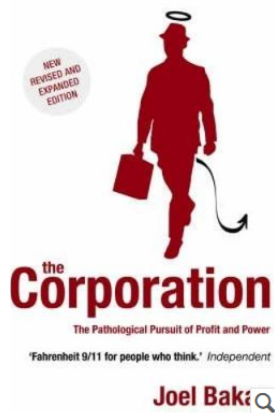
Although Jobs cooperated with this book, he asked for no control over what was written, nor even the right to read it before it was published. He put nothing off limits. He encouraged the people he knew to speak honestly. And Jobs speaks candidly, sometimes brutally so, about the people he worked with and competed against. His friends, foes, and colleagues provide an unvarnished view of the passions, perfectionism, obsessions, artistry, devilry, and compulsion for control that shaped his approach to business and the innovative products that resulted.

of

## The Corporation: The Pathological Pursuit of Profit and Power by Joel Bakan

The most powerful class of institution on earth, the corporation, is by any reasonable measure hopelessly and unavoidably demented. The corporation lies, steals and kills without remorse and without hesitation when it serves the interests of its shareholders to do so. It obeys the law only when the costs of crime exceed the profits. Corporate social responsibility is impossible except insofar as it is insincere.

At once a diagnosis and a course of treatment, *The Corporation* is essential reading for those who want to understand the nature of the modern business system. It is a sober and careful attempt to describe the world as it is, rather than as corporate public relations departments would have us believe it to be. It reveals a world more exotic and more terrifying than any of us could have imagined. And although a billion dollar industry is trying to convince you otherwise, the corporations that surround us are not our friends. Charming and plausible though they are, they can only ever see us as resources to be used. This is the real world, not science fiction, and it really is us or them.



## The Founders: Elon Musk, Peter Thiel and the Company that Made the Modern Internet by Jimmy Soni

Out of PayPal's ranks have come three billionaires and dozens of multi-millionaires, including household names like Elon Musk, Peter Thiel and Reid Hoffman. PayPal's alumni have built, funded and advised almost all of the billion-dollar-plus companies to emerge from Silicon Valley in the past two decades.

Today, every online video you watch and every internet purchase you make bears PayPal's fingerprints - its inventions made the modern internet possible and are embedded in our social networks, our banks and our intelligence agencies.

This book tells the gripping story of how the so-called PayPal Mafia turned a scrappy start-up into one of the most successful businesses of all time, worth over \$70 billion today. Full of fascinating characters and anecdotes about Silicon Valley's biggest titans, *The Founders* also shows how its founders continue to shape our future today.



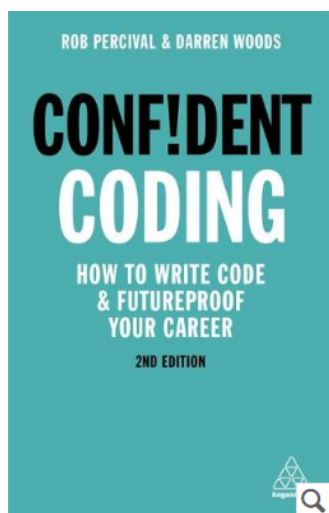
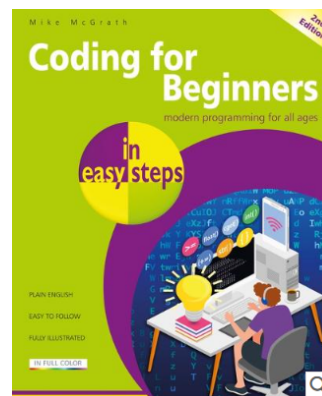
## Shoe Dog: A Memoir by the Creator of Nike by Phil Knight

In 1962, fresh out of business school, Phil Knight borrowed \$50 from his father and created a company with a simple mission: import high-quality, low-cost athletic shoes from Japan. Selling the shoes from the boot of his Plymouth, Knight grossed \$8000 in his first year. Today, Nike's annual sales top \$30 billion. In an age of start-ups, Nike is the ne plus ultra of all start-ups, and the swoosh has become one of the most ubiquitous and recognisable symbols in the world today.

For the first time, Phil Knight spells out the complete story behind that success, peeling back the gloss of a global multinational to reveal the pitfalls and glories of founding - and building - Nike. From the almost accidental nature of the company logo to the vast complexities of a leading edge business split around the globe, *Shoe Dog* is very much a business bible for the 21st century.

## Coding for Beginners in Easy Steps by Mike McGraph

Basic Programming for all ages – an introductory book to simple programming and coding



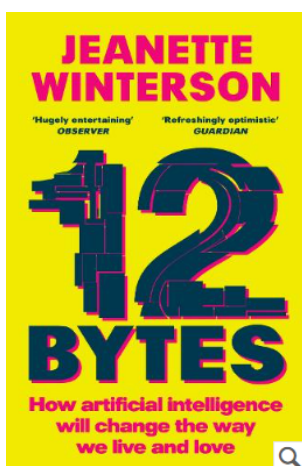
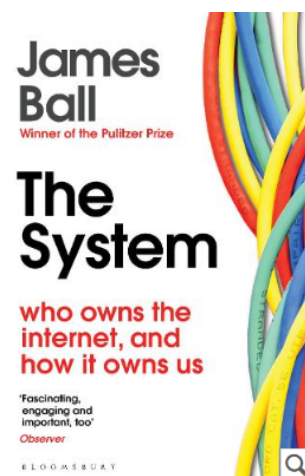
## Confident Coding: How to Write Code and Future Proof Your Career by Rob Percival and Darren Woods

*Coding is one of the most in-demand skills in the job market. Whether you're an entrepreneur, a recent graduate or a professional, you can supercharge your career simply by grasping the fundamentals, and **Confident Coding** is here to help. This new and improved second edition of the award-winning book gives you a step-by-step learning guide to HTML, CSS, JavaScript, Python, building iPhone and Android apps and debugging. For entrepreneurs, being able to create your own website or app can grant you valuable freedom and revolutionise your business. For aspiring developers, this book will give you the building blocks to embark on your career path. For working professionals, coding skills can add a valuable edge to your CV. Whatever your professional profile, if you want to master the fundamentals of coding and kick start your career, **Confident Coding** is the book for you. About the Confident series... From coding and web design to data, digital content and cyber security, the Confident books are the perfect beginner's resource for enhancing your professional life, whatever your career path.*

## The System: who owns the Internet and how it owns us by James Ball

*The internet is a network of physical cables and connections, a web of wires enmeshing the world, linking huge data centres to one another and eventually to us. All are owned by someone, financed by someone, regulated by someone. We refer to the internet as abstract from reality. By doing so, we obscure where the real power lies.*

*In this powerful and necessary book, James Ball sets out on a global journey into the inner workings of the system. From the computer scientists to the cable guys, the billionaire investors to the ad men, the intelligence agencies to the regulators, these are the real-life figures powering the internet and pulling the strings of our society. Ball brilliantly shows how an invention once hailed as a democratising force has concentrated power in places it already existed - that the system, in other words, remains the same as it did before.*



## 12 Bytes: How Artificial Intelligence Will Change the Way we Live and Love by Jeanette Winterson

How is artificial intelligence changing the way we live and love? Now with a new chapter, this is the eye-opening new book from *Sunday Times* bestselling author Jeanette Winterson.

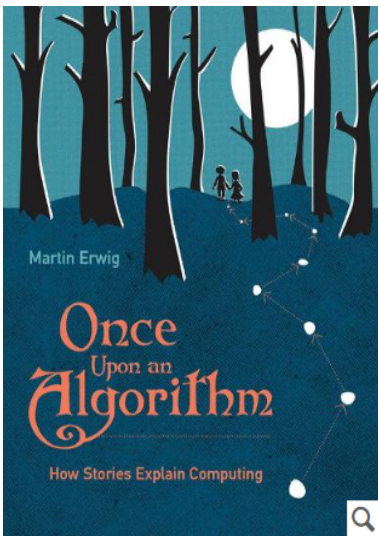
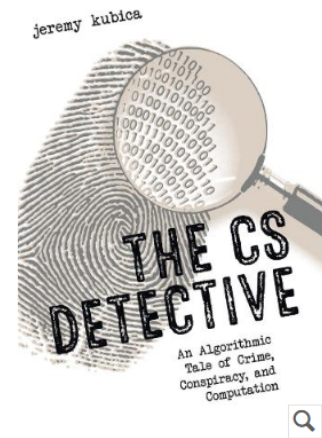
Drawing on her years of thinking and reading about AI, Jeanette Winterson looks to history, religion, myth, literature, politics and, of course, computer science to help us understand the radical changes to the way we live and love that are happening now.

With wit, compassion and curiosity, Winterson tackles AI's most interesting talking points - from the weirdness of backing up your brain and the connections between humans and non-human helpers to whether it's time to leave planet Earth.



## The CS Detective: An Algorithmic Tale of Crime, Conspiracy, and Computation by Jeremy Kubica

Meet Frank Runtime. Disgraced ex-detective. Hard-boiled private eye. Search expert. When a robbery hits police headquarters, it's up to Frank Runtime and his extensive search skills to catch the culprits. In this detective story, you'll learn how to use algorithmic tools to solve the case. Runtime scours smugglers boats with binary search, tails spies with a search tree, escapes a prison with depth-first search, and picks locks with priority queues. Joined by know-it-all rookie Officer Notation and inept tag-along Socks, he follows a series of leads in a best-first search that unravels a deep conspiracy. Each chapter introduces a thrilling twist matched with a new algorithmic concept, ending with a technical recap. Perfect for computer science students and amateur sleuths alike, *The CS Detective* adds an entertaining twist to learning algorithms. Follow Frank's mission and learn: The algorithms behind best-first and depth-first search, iterative deepening, parallelizing, binary search etc...



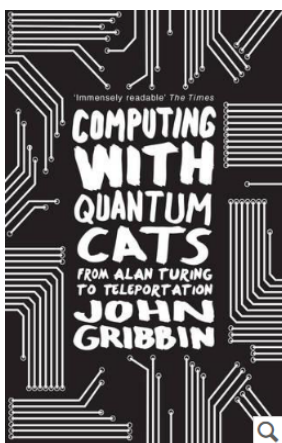
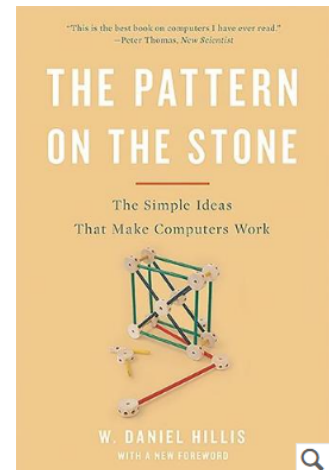
## Once Upon An Algorithm: How Stories Explain Computing by Martin Erwig

Picture a computer scientist, staring at a screen and clicking away frantically on a keyboard, hacking into a system, or perhaps developing an app. Now delete that picture. In *Once Upon an Algorithm*, Martin Erwig explains computation as something that takes place beyond electronic computers, and computer science as the study of systematic problem solving. Erwig points out that many daily activities involve problem solving. Getting up in the morning, for example: You get up, take a shower, get dressed, eat breakfast. This simple daily routine solves a recurring problem through a series of well-defined steps. In computer science, such a routine is called an algorithm. Erwig illustrates a series of concepts in computing with examples from daily life and familiar stories. Hansel and Gretel, for example, execute an algorithm to get home from the forest. The movie *Groundhog Day* illustrates the problem of unsolvability; Sherlock Holmes manipulates data structures when solving a crime; the magic in Harry Potter's world is understood through types and abstraction; and Indiana Jones demonstrates the complexity of searching. Along the way, Erwig also discusses representations and different ways to organise data; "intractable" problems; language, syntax, and ambiguity; control structures, loops, and the halting problem; different forms of recursion; and rules for finding errors in algorithms. This engaging book explains computation accessible and shows its relevance to daily life. Something to think

about next time we execute the algorithm of getting up in the morning.

## The Pattern On The Stone by W. Daniel Hillis

Most people are baffled by how computers work and assume that they will never understand them. What they don't realise, and what Daniel Hillis's short book brilliantly demonstrates, is that computers seemingly complex operations can be broken down into a few simple parts that perform the same simple procedures over and over again. Computer wizard Hillis offers an easy-to-follow explanation of how data is processed that makes the operations of a computer seem as straightforward as those of a bicycle. Avoiding technobabble or discussions of advanced hardware, the lucid explanations and colourful anecdotes in *The Pattern on the Stone* go straight to the heart of what computers really do. Hillis proceeds from an outline of basic logic to clear descriptions of programming languages, algorithms, and memory. He then takes readers in simple steps up to the most exciting developments in computing today, quantum computing, parallel computing, neural networks, and self-organising systems. Written clearly and succinctly by one of the world's leading computer scientists, *The Pattern on the Stone* is an indispensable guide to understanding the workings of that most ubiquitous and important of machines: the computer.



## Computing with Quantum Cats by John Gribbin

The quantum computer is no longer the stuff of science fiction. Pioneering physicists are on the brink of unlocking a new quantum universe which provides a better representation of reality than our everyday experiences and common sense ever could. The birth of quantum computers - which, like Schrodinger's famous 'dead and alive' cat, rely on entities like electrons, photons or atoms existing in two states at the same time - is set to turn the computing world on its head.

In his fascinating study of this cutting-edge technology, John Gribbin updates his previous views on the nature of quantum reality, arguing for a universe of many parallel worlds where 'everything is real'. Looking back to Alan Turing's work on the Enigma machine and the first electronic computer, Gribbin explains how quantum theory developed to make quantum computers work in practice as well as in principle. He takes us beyond the arena of theoretical physics to explore their practical applications - from machines which learn through 'intuition' and trial and error to unhackable laptops and smartphones. And he investigates the potential for this extraordinary science to create a world where communication occurs faster than light and teleportation is possible.