A comprehensive text that is devoted to teaching students all the basic knowledge of computer science. It includes topics such as the history of computing, languages used, models of computation, computability and Turing's halting problem.

Starting with what computer science is and how it was derived from an older discipline called electrical engineering, this book talks about how computers are constructed and more importantly designed. They also talk about some common programming languages that are used on a daily basis. The book then goes into detail about the modeling of different algorithms for automating tasks that may be repetitive or boring. Finally they talk about whether computers can solve unsolvable problems which is known as the "Turing's halting problem. If you are in the market for a text in which you can learn about all these topics, this is the one. This book is well known in the industry for its easy to understand writing style coupled with basic information that would be beneficial to any college student or inventor who wish to learn basic computer science.

This book was written by one of the pioneers in digital computers, Arthur Samuel, who was one of the pioneers in computer design. He writes this book after 2 years of working with Howard Aiken at Harvard University. This book goes into detail about how circuits are used in digital machines and how they are really powerful tools for solving problems even before they are invented. If you are looking for a book that talks about basic mathematical concepts for explaining how these circuits work, this is the book.

This is a Text of Computing Science by Joseph Weizenbaum of MIT. This text is not written by a famous author but by a computer scientist who was employed at MIT. He writes on the programming of computers and not just on theoretical aspects of how to program them. This book has been widely used as a textbook in universities all over the world. This book has been translated into many languages and it has been used as a textbook in thousands of universities worldwide so far so there is no doubt it will be required reading by your college student if they have chosen to major in computer science. If you are looking for a book that is very comprehensive in its coverage of computer science, this book by Simon Singh will be an excellent choice. In this book, the author covers wide areas of computer science from the history of computing to artificial intelligence, from binary numbers to string theory. This leaves no stones unturned in explaining the nuts and bolts and underlying philosophies and mathematics behind every topic in computer science. The author's writing style is very accessible and leaves no detail unexplained making it a delight to read even for non-tech people. This is a compilation of the best code for teaching computer science which has been published over the years. It contains some fun and quirky codes while also having some categorized pointers for new programmers. This book was written by a well known computer scientist, Donald Knuth whose books have been used worldwide as textbooks in coding methodology and algorithms. This book talks about basic mathematical concepts in computing while going into detail about algorithms which includes binary search, sorting, graphs and trees. In this book, you will find all kinds of problems that can be solved with these techniques from searching a database to binary search on strings to searching on graphs for paths that go from one point to another or on strings for digits on either side of the middle.

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