

[DOWNLOAD](#)

Computing Boolean Statistical Models

By Paulo Murilo Castrode Oliveira

Hardback. Book Condition: New. Not Signed; Computer Simulation is a very important tool in modern science, playing an intermediate role between theoretical models and experiments. In particular, an important fraction of the human knowledge about critical phenomena and phase transitions is due to computer simulations performed on statistical models. In this text, a class of statistical models that allows parallel processing using conventional hardware is treated using only personal computers. This class of systems is defined on a discrete lattice of points, and every point holds a Boolean variable that can assume only two values, 1 or 0, these can be associated to the logical values true and false respectively. The parallel processing is possible due to the Boolean operations AND, OR, XOR (for exclusive OR) and NOT provided by any digital computer. The strategy shown in the text consists of storing the state of the system bit by bit in computer words (each one with 16 bits in our personal computer) and processing them in parallel through fast bitwise logical operations. Using this strategy, various problems like the exact computation of the thermodynamic properties of small systems (for real space renormalization group calculations) and the Monte-Carlo simulation of uniform ferromagnets,...



[READ ONLINE](#)
[1.54 MB]

Reviews

Extensive guide! Its such a very good read. I really could comprehend almost everything out of this created e book. You will like how the writer write this ebook.

-- **Katherine Feil**

Comprehensive information! Its this sort of very good read through. This is certainly for all those who statte that there was not a worthy of studying. Your daily life period will likely be convert as soon as you total reading this publication.

-- **Candace Kling**

Other Kindle Books



[First Fairy Tales](#)

Board book. Book Condition: New. Not Signed; This is a traditional story that is retold in rhyme in this chunky padded boardbook. When a couple of tailors offer to make a suit from material so wondrous that only clever people can see...



[Oxford Reading Tree Treetops Time Chronicles: Level 13: the Stone of Destiny \(Paperback\)](#)

Oxford University Press, United Kingdom, 2014. Paperback. Book Condition: New. Mr. Alex Brychta (illustrator). 205 x 148 mm. Language: English . Brand New Book. In The Stone of Destiny the Time Runners battle to stop a fiendish Viran plan to steal the...



[From Dare to Due Date \(Paperback\)](#)

Harlequin, United States, 2016. Paperback. Book Condition: New. Not for Online.. 168 x 104 mm. Language: English . Brand New Book. THE NIGHT THEY MADE A BABY Mia Palinski had never even considered herself the kind of girl to have a one-night...



[The Kid](#)

Paperback. Book Condition: New. Not Signed; Winky thought he'd seen everything in Wyoming Territory: rustlers, hangings, shoot-outs, cattle standing frozen stiff in the snow. Then into town one lazy day rode a long-haired kid and a colossal African mute. They were met...



[NIV Soul Survivor New Testament in One Year](#)

Paperback. Book Condition: New. Not Signed; 'The whole Bible, in just one year? You've got to be kidding.' Don't panic! How about just the New Testament to start off with? Take thousands of young people all committed to reading the word together...



[The Secret That Shocked de Santis \(Paperback\)](#)

Harlequin, United States, 2016. Paperback. Book Condition: New. Not for Online.. 165 x 104 mm. Language: English . Brand New Book. How is she going to tell him? Army lieutenant Stella Zambrano had the surprise of her life when a routine medical...
