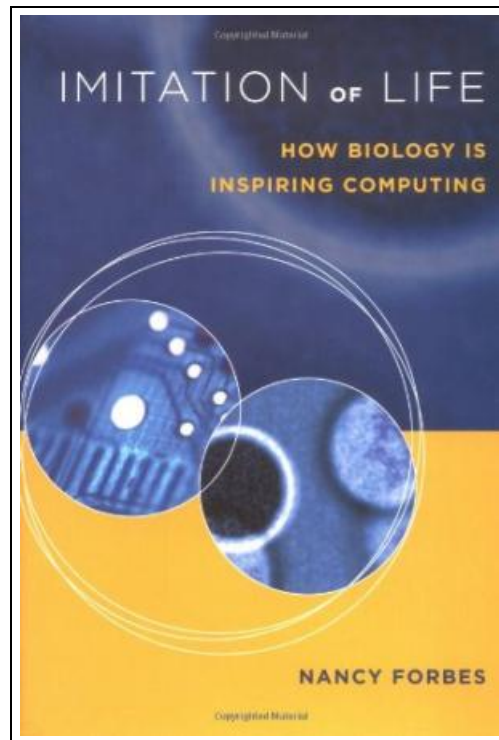


Imitation of Life: How Biology Is Inspiring Computing (Hardback)



Filesize: 7.3 MB

Reviews

A really great pdf with lucid and perfect information. It is rally fascinating throgh reading through time. I am effortlessly can get a pleasure of reading a published book.

(Reyes Lind)

IMITATION OF LIFE: HOW BIOLOGY IS INSPIRING COMPUTING (HARDBACK)**DOWNLOAD**

MIT Press Ltd, United States, 2004. Hardback. Condition: New. Language: English. Brand new Book. How scientists are using nature as model and metaphor to reinvent computing: a survey of an emerging field. As computers and the tasks they perform become increasingly complex, researchers are looking to nature-as model and as metaphor-for inspiration. The organization and behavior of biological organisms present scientists with an invitation to reinvent computing for the complex tasks of the future. In *Imitation of Life*, Nancy Forbes surveys the emerging field of biologically inspired computing, looking at some of the most impressive and influential examples of this fertile synergy. Forbes points out that the influence of biology on computing goes back to the early days of computer science-John von Neumann, the architect of the first digital computer, used the human brain as the model for his design. Inspired by von Neumann and other early visionaries, as well as by her work on the "Ultrascale Computing" project at the Defense Advanced Research Projects Agency (DARPA), Forbes describes the exciting potential of these revolutionary new technologies. She identifies three strains of biologically inspired computing: the use of biology as a metaphor or inspiration for the development of algorithms; the construction of information processing systems that use biological materials or are modeled on biological processes, or both; and the effort to understand how biological organisms "compute," or process information. Forbes then shows us how current researchers are using these approaches. In successive chapters, she looks at artificial neural networks; evolutionary and genetic algorithms, which search for the "fittest" among a generation of solutions; cellular automata; artificial life-not just a simulation, but "alive" in the internal ecosystem of the computer; DNA computation, which uses the encoding capability of DNA to devise algorithms; self-assembly and its potential use in nanotechnology; amorphous computing, modeled on the...

[Read Imitation of Life: How Biology Is Inspiring Computing \(Hardback\) Online](#)[Download PDF Imitation of Life: How Biology Is Inspiring Computing \(Hardback\)](#)

Related PDFs



Scientific and Applied Pharmacognosy, Intended for the Use of Students in Pharmacy, as a Hand Book for Pharmacists, and as a Reference Book for Food and Drug Analysts and Pharmacologists (Hardback)

Franklin Classics, United States, 2018. Hardback. Condition: New. Language: English. Brand new Book. This work has been selected by scholars as being culturally important and is part of the knowledge base of civilization as we...

[Read](#) [eBook](#)

»



Scientific and Applied Pharmacognosy: Intended for the Use of Students in Pharmacy, as a Hand Book for Pharmacists, and as a Reference Book for Food and Drug Analysts and Pharmacologists (Hardback)

Arkose Press, United States, 2015. Hardback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****.This work has been selected by scholars as being culturally important, and is part of the knowledge...

[Read](#) [eBook](#)

»



Reading Matthew as the Climactic Fulfillment of the Hebrew Story (Hardback)

Wipf & Stock Publishers, United States, 2015. Hardback. Condition: New. Language: English. Brand new Book. This book is a reading of Matthew's Gospel as though it were written to integrate with, advance, and conclude the...

[Read](#) [eBook](#)

»



How to Be a Man (Hardback)

HarperCollins Publishers, United Kingdom, 2018. Hardback. Condition: New. Language: English. Brand new Book. Are men supposed to be fighters? Lovers? Hunter-gatherers? Fashionistas? Business gurus? Culinary experts? You're wrong if you think one man can't be...

[Read](#) [eBook](#)

»



Life's Healing Choices: Freedom from Your Hurts, Hang-ups, and Habits (Hardback)

SIMON & SCHUSTER, United States, 2007. Hardback. Condition: New. Language: English. Brand new Book. LIFE HAPPENS. Happiness and Healing are yours for the choosing. We've all been hurt by other people, we've hurt ourselves, and...

[Read](#) [eBook](#)

»