



Orchestrated Biocomputation: Unravelling the Mystery of Slime Mould Intelligence (Paperback)

By Richard Mayne

Luniver Press, 2016. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****. Although significant technical and ethical barriers impede our progress towards actualising useful biocomputers, the use of live biological substrates in the fabrication of novel computing devices is steadily transcending the barriers between science fiction and reality. Orchestrated Biocomputation documents studies on the design, fabrication and testing of prototype unconventional computing devices which utilise a live organism - the plasmodium of slime mould *Physarum polycephalum* - as their key constituent element. By harnessing the apparently intelligent behaviours these single-celled organisms are known to exhibit, slime mould computing devices shed light on how biological matter gives rise to complexity and, crucially, how to exploit it for practical benefit. The research presented here provides a unique multidisciplinary perspective on the investigation and laboratory experimental manipulation of emergent biological processes that may be characterised as natural expressions of computation. It covers such diverse topics as the fabrication of bio-computer interfaces, programming cells to memorise and anticipate periodic stimulation, image manipulation through cellular morphological adaptation and using nano-scale protein networks and cell signalling phenomena as the basis of logical circuitry. Richard Mayne is a rising star of the...

DOWNLOAD



READ ONLINE
[905.18 KB]

Reviews

If you need to adding benefit, a must buy book. It can be loaded with wisdom and knowledge I discovered this ebook from my dad and i encouraged this pdf to discover.

-- **Darrin Kutch**

This publication is wonderful. I actually have go through and i am sure that i am going to going to study once more once more down the road. I am easily could get a enjoyment of studying a written book.

-- **Mozelle Halvorson**

You May Also Like



Fifty Years Hence, or What May Be in 1943

Createspace, United States, 2015. Paperback. Book Condition: New. 279 x 216 mm. Language: English . Brand New Book ***** Print on Demand *****. Fifty Years Hence is a quasi-fictional work by Robert Grimshaw, a professional engineer, with the intent of making a...



Becoming Barenaked: Leaving a Six Figure Career, Selling All of Our Crap, Pulling the Kids Out of School, and Buying an RV We Hit the Road in Search Our Own American Dream. Redefining What It Meant to Be a Family in America.

Createspace, United States, 2015. Paperback. Book Condition: New. 258 x 208 mm. Language: English . Brand New Book ***** Print on Demand *****.This isn t porn. Everyone always asks and some of our family thinks it is for sure.but its not...



Character Strengths Matter: How to Live a Full Life

Positive Psychology News, United States, 2015. Paperback. Book Condition: New. 226 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.What are the elements of good character? The Values in Action (VIA) project identified 24 qualities such as...



It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em

HarperCollins Publishers. Paperback. Book Condition: new. BRAND NEW, It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em, Greg Behrendt, Amiira Ruotola-Behrendt, A fabulous new guide to dating co-authored by Greg Behrendt, former writer on...



Daddyteller: How to Be a Hero to Your Kids and Teach Them What s Really by Telling Them One Simple Story at a Time

Createspace, United States, 2013. Paperback. Book Condition: New. 214 x 149 mm. Language: English . Brand New Book ***** Print on Demand *****.You have the power, Dad, to influence and educate your child. You can teach your child about a virtue or...



My Life as an Experiment: One Man s Humble Quest to Improve Himself by Living as a Woman, Becoming George Washington, Telling No Lies, and Other Radical Tests

SIMON SCHUSTER, United States, 2010. Paperback. Book Condition: New. Reprint. 212 x 138 mm. Language: English . Brand New Book. One man. Ten extraordinary quests. Bestselling author and human guinea pig A. J. Jacobs puts his life to the test and reports...