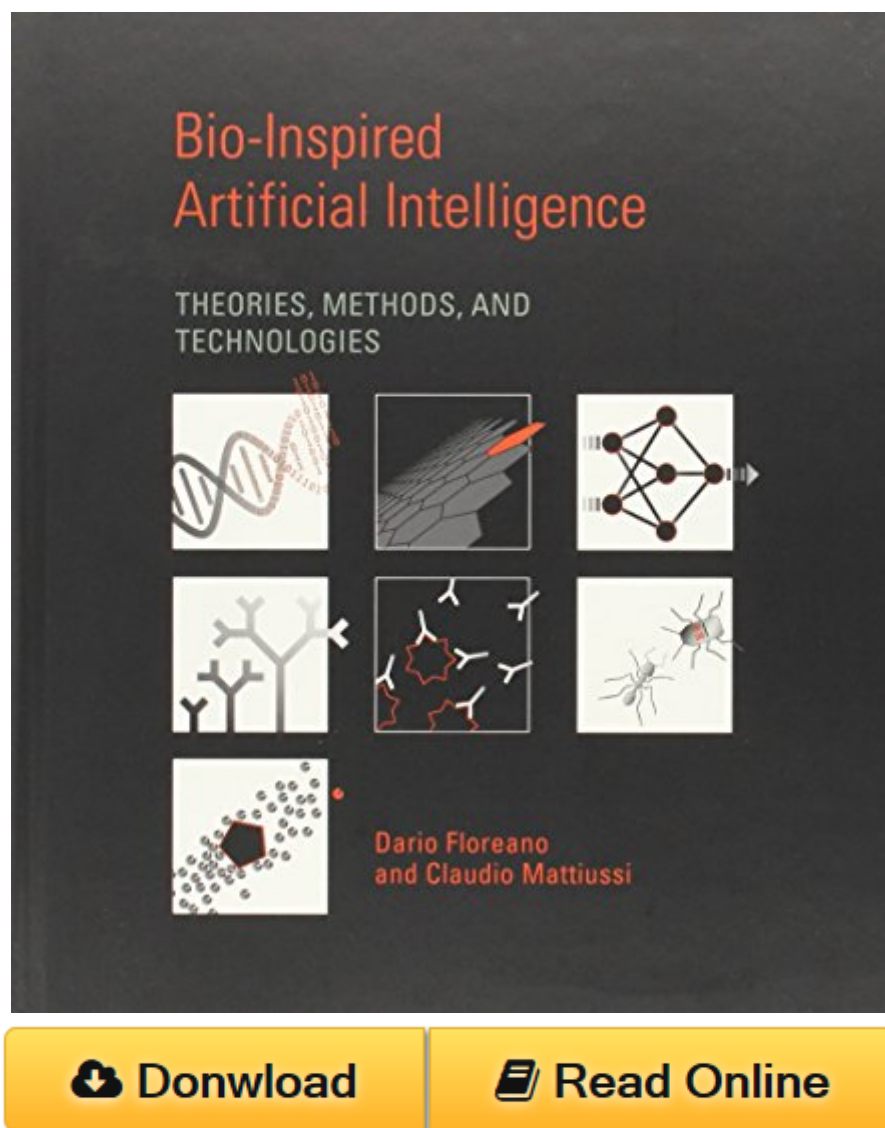


Bio-Inspired Artificial Intelligence: Theories, Methods, and Technologies (Intelligent Robotics and Autonomous Agents series) PDF



Bio-Inspired Artificial Intelligence: Theories, Methods, and Technologies (Intelligent Robotics and Autonomous Agents series) by Dario Floreano, Claudio Mattiussi ISBN 0262062712

New approaches to artificial intelligence spring from the idea that intelligence emerges as much from cells, bodies, and societies as it does from evolution, development, and learning. Traditionally, artificial intelligence has been concerned with reproducing the abilities of human brains; newer approaches take inspiration from a wider range of biological structures that that are

capable of autonomous self-organization. Examples of these new approaches include evolutionary computation and evolutionary electronics, artificial neural networks, immune systems, biorobotics, and swarm intelligence -- to mention only a few. This book offers a comprehensive introduction to the emerging field of biologically inspired artificial intelligence that can be used as an upper-level text or as a reference for researchers. Each chapter presents computational approaches inspired by a different biological system; each begins with background information about the biological system and then proceeds to develop computational models that make use of biological concepts. The chapters cover evolutionary computation and electronics; cellular systems; neural systems, including neuromorphic engineering; developmental systems; immune systems; behavioral systems -- including several approaches to robotics, including behavior-based, bio-mimetic, epigenetic, and evolutionary robots; and collective systems, including swarm robotics as well as cooperative and competitive co-evolving systems. Chapters end with a concluding overview and suggested reading.

Bio-Inspired Artificial Intelligence: Theories, Methods, and Technologies (Intelligent Robotics and Autonomous Agents series) Review

This Bio-Inspired Artificial Intelligence: Theories, Methods, and Technologies (Intelligent Robotics and Autonomous Agents series) book is not really ordinary book, you have it then the world is in your hands. The benefit you get by reading this book is actually information inside this reserve incredible fresh, you will get information which is getting deeper an individual read a lot of information you will get. This kind of Bio-Inspired Artificial Intelligence: Theories, Methods, and Technologies (Intelligent Robotics and Autonomous Agents series) without we recognize teach the one who looking at it become critical in imagining and analyzing. Don't be worry Bio-Inspired Artificial Intelligence: Theories, Methods, and Technologies (Intelligent Robotics and Autonomous Agents series) can bring any time you are and not make your tote space or bookshelves' grow to be full because you can have it inside your lovely laptop even cell phone. This Bio-Inspired Artificial Intelligence: Theories, Methods, and Technologies (Intelligent Robotics and Autonomous Agents series) having great arrangement in word and layout, so you will not really feel uninterested in reading.