1. Record Nr. UNINA9910338006903321

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Titolo	Artificial Neural Networks with Java : Tools for Building Neural Network Applications / / by Igor Livshin
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2019
ISBN	9781484244210 1484244214
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (xix, 566 pages) : illustrations
Disciplina	006.32
Soggetti	Java (Computer program language) Artificial intelligence Open source software Computer programming Java Artificial Intelligence Open Source
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Chapter 1. Learning Neural Networks -- Chapter 2. Internal Mechanism of Neural Network Processing -- Chapter 3. Manual Neural Network Processing -- Chapter 4. Java Environment and Development Tools for Building Neural Network Applications -- Chapter 5. Neural Network Development Using Java Framework -- Chapter 6. Neural network Prediction outside of the Training Range -- Chapter 7. Processing More Complex Periodic Functions -- Chapter 8. Processing Non-continuous Functions -- Chapter 9. Approximation Continuous Functions with Complex Topology -- Chapter 10. Using Neural Network for Classification of Objects -- Chapter 11. Importance of Selecting a Correct Model -- Chapter 12. Approximation of Functions in 3-D Space.
Sommario/riassunto	Use Java to develop neural network applications in this practical book. After learning the rules involved in neural network processing, you will manually process the first neural network example. This covers the internals of front and back propagation, and facilitates the

understanding of the main principles of neural network processing. Artificial Neural Networks with Java also teaches you how to prepare the data to be used in neural network development and suggests various techniques of data preparation for many unconventional tasks. The next big topic discussed in the book is using Java for neural network processing. You will use the Encog Java framework and discover how to do rapid development with Encog, allowing you to create large-scale neural network applications. The book also discusses the inability of neural networks to approximate complex non-continuous functions, and it introduces the micro-batch method that solves this issue. The step-by-step approach includes plenty of examples, diagrams, and screen shots to help you grasp the concepts quickly and easily. You will: Prepare your data for many different tasks Carry out some unusual neural network tasks Create neural network to process non-continuous functions Select and improve the development model .