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   Disciplina 006

   Soggetti Artificial intelligence
   Programming languages (Electronic computers)
   Computer programming
   Artificial Intelligence
   Programming Languages, Compilers, Interpreters
   Programming Techniques

   Lingua di pubblicazione Inglese

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   Nota di bibliografia Includes bibliographical references at the end of each chapters and index.

   Nota di contenuto 1 Overview of Machine Learning -- 2 The History of Machine Learning -- 3 Software for machine learning -- 4 Representation of data for Machine Learning in MATLAB -- 5 MATLAB Graphics -- 6 Machine Learning Examples in MATLAB -- 7 Face Recognition with Deep Learning -- 8 Data Classification -- 9 Classification of Numbers Using Neural Networks -- 10 Kalman Filters -- 11 Adaptive Control -- 12 Autonomous Driving -- Bibliography.

   Sommario/riassunto This book is a comprehensive guide to machine learning with worked examples in MATLAB. It starts with an overview of the history of Artificial Intelligence and automatic control and how the field of machine learning grew from these. It provides descriptions of all major areas in machine learning. The book reviews commercially available packages for machine learning and shows how they fit into the field. The book then shows how MATLAB can be used to solve machine learning problems and how MATLAB graphics can enhance the programmer's understanding of the results and help users of their software grasp the results. Machine Learning can be very mathematical.

The mathematics for each area is introduced in a clear and concise form so that even casual readers can understand the math. Readers from all areas of engineering will see connections to what they know and will learn new technology. The book then provides complete solutions in MATLAB for several important problems in machine learning including face identification, autonomous driving, and data classification. Full source code is provided for all of the examples and applications in the book. What you'll learn: An overview of the field of machine learning Commercial and open source packages in MATLAB How to use MATLAB for programming and building machine learning applications MATLAB graphics for machine learning Practical real world examples in MATLAB for major applications of machine learning in big data Who is this book for: The primary audiences are engineers and engineering students wanting a comprehensive and practical introduction to machine learning.