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Descrizione fisica	1 online resource (458 pages) : illustrations (some color), charts
Disciplina	006.31
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Nota di contenuto	Chapter 1. An Overview of Machine Learning -- Chapter 2. Data Representation -- Chapter 3. MATLAB Graphics -- Chapter 4. Kalman Filters -- Chapter 5. Adaptive Control -- Chapter 6. Neural Aircraft Control -- Chapter 7. Fuzzy Logic -- Chapter 8. Classification with Neural Nets -- Chapter 9. Simple Neural Nets -- Chapter 10. Data Classification. - Chapter 11. Neural Nets with Deep Learning -- Chapter 12. Multiple Hypothesis Testing -- Chapter 13. Autonomous Driving with MHT -- Chapter 14. Case-Based Expert Systems -- Chapter 15. Spacecraft Attitude Determination Using Neural Nets. - Appendix A Brief History of Autonomous Learning -- Appendix B. Software for Autonomous Learning.
Sommario/riassunto	Harness the power of MATLAB to resolve a wide range of machine learning challenges. This new and updated third edition provides examples of technologies critical to machine learning. Each example solves a real-world problem, and all code provided is executable. You can easily look up a particular problem and follow the steps in the solution. This book has something for everyone interested in machine learning. It also has material that will allow those with an interest in

other technology areas to see how machine learning and MATLAB can help them solve problems in their areas of expertise. The chapter on data representation and MATLAB graphics includes new data types and additional graphics. Chapters on fuzzy logic, simple neural nets, and autonomous driving have new examples added. And there is a new chapter on spacecraft attitude determination using neural nets. Authors Michael Paluszek and Stephanie Thomas show how all of these technologies allow you to build sophisticated applications to solve problems with pattern recognition, autonomous driving, expert systems, and much more. You will: Write code for machine learning, adaptive control, and estimation using MATLAB Use MATLAB graphics and visualization tools for machine learning Become familiar with neural nets Build expert systems Understand adaptive control Gain knowledge of Kalman Filters.
