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| Nota di contenuto | Chapter1. A Gentle Introduction to Feature Learning -- Chapter2. Latent Semantic Feature Learning -- Chapter3. Principal Component Analysis -- Chapter4. Local-Geometrical-Structure-based Feature Learning -- Chapter5. Linear Discriminant Analysis -- Chapter6. Kernel-based nonlinear feature learning -- Chapter7. Sparse feature learning -- Chapter8. Low rank feature learning -- Chapter9. Tensor-based Feature Learning -- Chapter10. Neural-network-based Feature |

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| | Learning: Autoencoder -- Chapter11. Neural-network-based Feature Learning: Convolutional Neural Network -- Chapter12. Neural-network-based Feature Learning: Recurrent Neural Network. |
| Sommario/riassunto | This book covers the essential concepts and strategies within traditional and cutting-edge feature learning methods thru both theoretical analysis and case studies. Good features give good models and it is usually not classifiers but features that determine the effectiveness of a model. In this book, readers can find not only traditional feature learning methods, such as principal component analysis, linear discriminant analysis, and geometrical-structure-based methods, but also advanced feature learning methods, such as sparse learning, low-rank decomposition, tensor-based feature extraction, and deep-learning-based feature learning. Each feature learning method has its own dedicated chapter that explains how it is theoretically derived and shows how it is implemented for real-world applications. Detailed illustrated figures are included for better understanding. This book can be used by students, researchers, and engineers looking for a reference guide for popular methods of feature learning and machine intelligence. |