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	Soggetti	Computational intelligence Artificial intelligence Computational Intelligence Artificial Intelligence
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	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
	Nota di contenuto	Motivation, Problems and Approach -- General Line Coordinates (GLC) -- Theoretical and Mathematical Basis of GLC -- Adjustable GLCs for decreasing occlusion and pattern simplification -- GLC Case Studies -- Discovering visual features and shape perception capabilities in GLC -- Interactive Visual Classification, Clustering and Dimension Reduction with GLC-L -- Knowledge Discovery and Machine Learning for Investment Strategy with CPC.
	Sommario/riassunto	This book combines the advantages of high-dimensional data visualization and machine learning in the context of identifying complex n-D data patterns. It vastly expands the class of reversible lossless 2-D and 3-D visualization methods, which preserve the n-D information. This class of visual representations, called the General Lines Coordinates (GLCs), is accompanied by a set of algorithms for n-D data classification, clustering, dimension reduction, and Pareto optimization. The mathematical and theoretical analyses and methodology of GLC are included, and the usefulness of this new approach is demonstrated in multiple case studies. These include the Challenger disaster, world hunger data, health monitoring, image processing, text classification, market forecasts for a currency

exchange rate, computer-aided medical diagnostics, and others. As such, the book offers a unique resource for students, researchers, and practitioners in the emerging field of Data Science.