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Nota di contenuto	OBJECT DETECTION AND RECOGNITION IN DIGITAL IMAGES; Contents; Preface; Acknowledgements; Notations and Abbreviations; 1 Introduction; 1.1 A Sample of Computer Vision; 1.2 Overview of Book Contents; References; 2 Tensor Methods in Computer Vision; 2.1 Abstract; 2.2 Tensor - A Mathematical Object; 2.2.1 Main Properties of Linear Spaces; 2.2.2 Concept of a Tensor; 2.3 Tensor - A Data Object; 2.4 Basic Properties of Tensors; 2.4.1 Notation of Tensor Indices and Components; 2.4.2 Tensor Products; 2.5 Tensor Distance Measures; 2.5.1 Overview of Tensor Distances 2.5.1.1 Computation of Matrix Exponent and Logarithm Functions 2.5.2 Euclidean Image Distance and Standardizing Transform; 2.6 Filtering of Tensor Fields; 2.6.1 Order Statistic Filtering of Tensor Data; 2.6.2 Anisotropic Diffusion Filtering; 2.6.3 IMPLEMENTATION of Diffusion Processes; 2.7 Looking into Images with the Structural Tensor; 2.7.1 Structural Tensor in Two-Dimensional Image Space; 2.7.2 Spatio-Temporal Structural Tensor; 2.7.3 Multichannel and Scale-Space

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 2.8 Object Representation with Tensor of Inertia and Moments 2.8.1
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Sommario/riassunto

Object detection, tracking and recognition in images are key problems in computer vision. This book provides the reader with a balanced treatment between the theory and practice of selected methods in these areas to make the book accessible to a range of researchers, engineers, developers and postgraduate students working in computer vision and related fields. Key features: Explains the main theoretical ideas behind each method (which are augmented with a rigorous mathematical derivation of the formulas), their implementation (in C++) and demonstrated working in real applications.