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2.12.3 Computation of the HOSVD2.12.3.1 Implementation of the HOSVD Decomposition; 2.12.4 HOSVD Induced Bases; 2.12.5 Tensor Best Rank-1 Approximation; 2.12.6 Rank-1 Decomposition of Tensors; 2.12.7 Best Rank-(R1, R2, . . . , RP) Approximation; 2.12.8 Computation of the Best Rank-(R1, R2, . . . , RP) Approximations; 2.12.8.1 IMPLEMENTATION - Rank Tensor Decompositions; 2.12.8.2 CASE STUDY - Data Dimensionality Reduction; 2.12.9 Subspace Data Representation; 2.12.10 Nonnegative Matrix Factorization; 2.12.11 Computation of the Nonnegative Matrix Factorization
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3.3.1.2 PCA for Multi-Channel Image Processing

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.