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Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Scale Space and Partial Differential Equations Methods -- Scale-Covariant and Scale-Invariant Gaussian Derivative Networks -- 1 Introduction -- 2 Relations to Previous Work -- 3 Gaussian Derivative Networks -- 3.1 Provable Scale Covariance -- 4 Experiments with a Single-Scale-Channel Network -- 4.1 Discrete Implementation -- 5 Experiments with a Multi-Scale-Channel Network -- 5.1 Scale Selection Properties -- 6 Summary and Discussion -- References -- Quantisation Scale-Spaces -- 1 Introduction -- 2 Quantisation Scale-Spaces -- 2.1 Scale-Space Properties -- 3 Relations to Sparsification Scale-Spaces -- 4 Applications to Quantisation and Compression -- 4.1 Uncommitted and Committed Quantisation -- 4.2 Inpainting-Based Compression -- 5 Conclusions -- References -- Equivariant Deep Learning via Morphological and Linear Scale Space PDEs on the Space of Positions and Orientations -- 1 Introduction -- 2 Design of PDE-Based Equivariant Neural Network -- 2.1 The Lifting Layer: Extending the Image Domain from Rd to Md -- 2.2 PDE Layers by Linear and Morphological Scale Spaces on Md -- 2.3 PDE-Based Deep Learning by G-CNNs on M2 -- 3 Linear and Morphological Kernel Implementation -- 3.1 Analytic Approximations of -Scale-Space Kernels on M2 -- 3.2 Analytic Approximations of -Dilation/Erosion Kernels on M2 -- 4 Experimental Observations and Analysis -- 5 Conclusion -- References

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