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12679

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Scale Space and Variational Methods in Computer Vision

8th International Conference, SSVM 2021 Virtual Event, May 16–20, 2021 Proceedings



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ISSN 0302-9743 ISSN 1611-3349 (electronic) Lecture Notes in Computer Science ISBN 978-3-030-75548-5 ISBN 978-3-030-75549-2 (eBook) https://doi.org/10.1007/978-3-030-75549-2

LNCS Sublibrary: SL6 - Image Processing, Computer Vision, Pattern Recognition, and Graphics

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Preface

The International Conference on Scale Space and Variational Methods in Computer Vision (SSVM) series was born in 2007 in Ischia, from the fusion of the biannual Conference on Scale Space and the workshop on Variational, Geometric and Level Set Methods (VLSM). Since then, it has become a major event in the mathematical imaging community. Following the tradition of biannual events at beautiful, remote places, the 8th edition of this conference (SSVM 2021, https://ssvm2021.sciencesconf.org/) was initially planned to take place in the romantic city of Cabourg, on the Normandy coast in France. However, the conference was eventually held online due to the COVID-19 pandemic situation.

The conference provides a platform for state-of-the-art scientific exchange on topics related to computer vision and image analysis, including diverse themes such as 3D-vision, convex and non-convex variational modeling, image analysis, inverse problems in imaging, optimization methods in imaging, machine learning in imaging, PDEs in image processing, registration, restoration and reconstruction, scale-space methods, and segmentation. The 45 contributions (15 selected for oral presentation and 30 for poster presentation) in this proceedings demonstrate a strong and lively community. The contributions underwent a rigorous peer-review process similar to that of a high-ranking journal in the field.

Following the tradition of previous SSVM conferences, four outstanding researchers were invited to give a keynote presentation: Daniel Cremers (TU Munich, Germany), Julie Delon (Université Paris Descartes, France), Carola-Bibiane Schönlieb (University of Cambridge, UK) and Jean-Luc Starck (CEA, France).

We would like to thank all those who contributed to the success of this conference. We are grateful to the authors for their contributions. We are indebted to the reviewers for their commitment, hard work and enthusiasm that made this event possible at the highest scientific standards. We thank the CNRS and NORMASTIC for financial support. Lastly, we thank the steering committee and the organizers of all the previous SSVM conferences.

April 2021

Abderrahim Elmoataz Jalal Fadili Yvain Quéau Julien Rabin Loïc Simon

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Julie Delon Professor at MAP5, Université Paris Descartes, France

Carola-Bibiane Schönlieb Professor and head of the Cambridge Image Analysis

group, University of Cambridge, UK

Jean-Luc Starck Director of CosmoStat, CEA, France

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Contents

Scale Space and Partial Differential Equations Methods	
Scale-Covariant and Scale-Invariant Gaussian Derivative Networks	3
Quantisation Scale-Spaces	15
Equivariant Deep Learning via Morphological and Linear Scale Space PDEs on the Space of Positions and Orientations	27
Nonlinear Spectral Processing of Shapes via Zero-Homogeneous Flows Jonathan Brokman and Guy Gilboa	40
Total-Variation Mode Decomposition	52
Fast Morphological Dilation and Erosion for Grey Scale Images Using the Fourier Transform	65
Diffusion, Pre-smoothing and Gradient Descent	78
Local Culprits of Shape Complexity	91
Extension of Mathematical Morphology in Riemannian Spaces El Hadji S. Diop, Alioune Mbengue, Bakary Manga, and Diaraf Seck	100
Flow, Motion and Registration	
Multiscale Registration	115
Challenges for Optical Flow Estimates in Elastography	128
An Anisotropic Selection Scheme for Variational Optical Flow Methods with Order-Adaptive Regularisation	140

Low-Rank Registration of Images Captured Under Unknown, Varying Lighting	153
Matthieu Pizenberg, Yvain Quéau, and Abderrahim Elmoataz	133
Towards Efficient Time Stepping for Numerical Shape Correspondence Alexander Köhler and Michael Breuß	165
First Order Locally Orderless Registration	177
Optimization Theory and Methods in Imaging	
First-Order Geometric Multilevel Optimization for Discrete Tomography Jan Plier, Fabrizio Savarino, Michal Kočvara, and Stefania Petra	191
Bregman Proximal Gradient Algorithms for Deep Matrix Factorization Mahesh Chandra Mukkamala, Felix Westerkamp, Emanuel Laude, Daniel Cremers, and Peter Ochs	204
Hessian Initialization Strategies for ℓ-BFGS Solving Non-linear Inverse Problems	216
Inverse Scale Space Iterations for Non-convex Variational Problems Using Functional Lifting	229
A Scaled and Adaptive FISTA Algorithm for Signal-Dependent Sparse Image Super-Resolution Problems	242
Convergence Properties of a Randomized Primal-Dual Algorithm with Applications to Parallel MRI	254
Machine Learning in Imaging	
Wasserstein Generative Models for Patch-Based Texture Synthesis Antoine Houdard, Arthur Leclaire, Nicolas Papadakis, and Julien Rabin	269
Sketched Learning for Image Denoising	281
Translating Numerical Concepts for PDEs into Neural Architectures	294

Conte	nts xiii
CLIP: Cheap Lipschitz Training of Neural Networks	307
Variational Models for Signal Processing with Graph Neural Networks . Amitoz Azad, Julien Rabin, and Abderrahim Elmoataz	320
Synthetic Images as a Regularity Prior for Image Restoration Neural Networks	333
Geometric Deformation on Objects: Unsupervised Image Manipulation via Conjugation	346
Learning Local Regularization for Variational Image Restoration Jean Prost, Antoine Houdard, Andrés Almansa, and Nicolas Papadaki	
Segmentation and Labelling	
On the Correspondence Between Replicator Dynamics and Assignment Flows	373
Learning Linear Assignment Flows for Image Labeling via Exponential Integration	385
On the Geometric Mechanics of Assignment Flows for Metric Data Labeling	398
A Deep Image Prior Learning Algorithm for Joint Selective Segmentation and Registration	
Restoration, Reconstruction and Interpolation	
Inpainting-Based Video Compression in FullHD Sarah Andris, Pascal Peter, Rahul Mohideen Kaja Mohideen, Joachim Weickert, and Sebastian Hoffmann	425
Sparsity-Aided Variational Mesh Restoration	437
Lossless PDE-based Compression of 3D Medical Images	450

Splines for Image Metamorphosis	463
Residual Whiteness Principle for Automatic Parameter Selection in ℓ_2 - ℓ_2 Image Super-Resolution Problems	476
Inverse Problems in Imaging	
Total Deep Variation for Noisy Exit Wave Reconstruction in Transmission Electron Microscopy	491
GMM Based Simultaneous Reconstruction and Segmentation in X-Ray CT Application	503
Phase Retrieval via Polarization in Dynamical Sampling	516
Invertible Neural Networks Versus MCMC for Posterior Reconstruction in Grazing Incidence X-Ray Fluorescence	528
Adversarially Learned Iterative Reconstruction for Imaging Inverse Problems. Subhadip Mukherjee, Ozan Öktem, and Carola-Bibiane Schönlieb	540
Towards Off-the-grid Algorithms for Total Variation Regularized Inverse Problems	553
Multi-frame Super-Resolution from Noisy Data	565
Author Index	579