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Combinatorial Image Analysis

10th International Workshop, IWCI A 2004
Auckland, New Zealand, December 1-3, 2004
Proceedings

 Springer

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Library of Congress Control Number: 2004115523

CR Subject Classification (1998): I.4, I.5, I.3.5, F.2.2, G.2.1, G.1.6

ISSN 0302-9743

ISBN 3-540-23942-1 Springer Berlin Heidelberg New York

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Printed in Germany

Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India
Printed on acid-free paper SPIN: 11360971 06/3142 5 4 3 2 1 0

Preface

This volume presents the proceedings of the 10th International Workshop on Combinatorial Image Analysis, held December 1–3, 2004, in Auckland, New Zealand. Prior meetings took place in Paris (France, 1991), Ube (Japan, 1992), Washington DC (USA, 1994), Lyon (France, 1995), Hiroshima (Japan, 1997), Madras (India, 1999), Caen (France, 2000), Philadelphia (USA, 2001), and Palermo (Italy, 2003). For this workshop we received 86 submitted papers from 23 countries. Each paper was evaluated by at least two independent referees. We selected 55 papers for the conference. Three invited lectures by Vladimir Kovalevsky (Berlin), Akira Nakamura (Hiroshima), and Maurice Nivat (Paris) completed the program.

Conference papers are presented in this volume under the following topical part titles: discrete tomography (3 papers), combinatorics and computational models (6), combinatorial algorithms (6), combinatorial mathematics (4), digital topology (7), digital geometry (7), approximation of digital sets by curves and surfaces (5), algebraic approaches (5), fuzzy image analysis (2), image segmentation (6), and matching and recognition (7). These subjects are dealt with in the context of digital image analysis or computer vision.

The editors thank all the referees for their big effort in reading and evaluating the submissions and maintaining the high standard of IWCIA conferences. We are also thankful to the sponsors of IWZIA 2004: the University of Auckland, in particular its Tamaki campus, for hosting the workshop, IAPR (the International Association for Pattern Recognition) for advertising the event, the Royal Society of New Zealand for its financial support, and CITR (the Centre for Image Technology and Robotics at Tamaki campus) and the Computer Science Department of the University of Auckland for providing the day-by-day support during the organizing the event. Also, many thanks to the members of the organizing and scientific committees, which made this conference possible.

September 2004

Reinhard Klette and Joviša Žunić

Organization

IWCIA 2004 was organized by the CITR—Centre for Image Technology and Robotics at Tamaki Campus—and the Computer Science Department, of the University of Auckland, New Zealand.

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Table of Contents

Discrete Tomography

Binary Matrices Under the Microscope: A Tomographical Problem <i>Andrea Frosini, Maurice Nivat</i>	1
On the Reconstruction of Crystals Through Discrete Tomography <i>K.J. Batenburg, W.J. Palenstijn</i>	23
Binary Tomography by Iterating Linear Programs from Noisy Projections <i>Stefan Weber, Thomas Schüle, Joachim Hornegger, Christoph Schnörr</i>	38

Combinatorics and Computational Models

Hexagonal Pattern Languages <i>K.S. Dersanambika, K. Krithivasan, C. Martin-Vide, K.G. Subramanian</i>	52
A Combinatorial Transparent Surface Modeling from Polarization Images <i>Mohamad Ivan Fanany, Kiiichi Kobayashi, Itsuo Kumazawa</i>	65
Integral Trees: Subtree Depth and Diameter <i>Walter G. Kropatsch, Yll Hazhimusa, Zygmunt Pizlo</i>	77
Supercover of Non-square and Non-cubic Grids <i>Troung Kieu Linh, Atsushi Imiya, Robin Strand, Gunilla Borgfors</i> ..	88
Calculating Distance with Neighborhood Sequences in the Hexagonal Grid <i>Benedek Nagy</i>	98
On Correcting the Unevenness of Angle Distributions Arising from Integer Ratios Lying in Restricted Portions of the Farey Plane <i>Imants Svalbe, Andrew Kingston</i>	110

Combinatorial Algorithms

Equivalence Between Regular n - G -Maps and n -Surfaces <i>Sylvie Alayrangues, Xavier Daragon, Jacques-Oliver Lachaud, Pascal Lienhardt</i>	122
Z-Tilings of Polyominoes and Standard Basis <i>Olivier Bodini, Bertrand Nouvel</i>	137
Curve Tracking by Hypothesis Propagation and Voting-Based Verification <i>Kazuhiko Kawamoto, Kaoru Hirota</i>	151
3D Topological Thinning by Identifying Non-simple Voxels <i>Gisela Klette, Mian Pan</i>	164
Convex Hulls in a 3-Dimensional Space <i>Vladimir Kovalevsky, Henrik Schulz</i>	176
A Near-Linear Time Algorithm for Binarization of Fingerprint Images Using Distance Transform <i>Xuefeng Liang, Arijit Bishnu, Tetsuo Asano</i>	197

Combinatorial Mathematics

On Recognizable Infinite Array Languages <i>S. Gnanasekaran, V.R. Dare</i>	209
On the Number of Digitizations of a Disc Depending on Its Position <i>Martin N. Huxley, Joviša Žunić</i>	219
On the Language of Standard Discrete Planes and Surfaces <i>Damien Jamet</i>	232
Characterization of Bijective Discretized Rotations <i>Bertrand Nouvel, Eric Rémila</i>	248

Digital Topology

Magnification in Digital Topology <i>Akira Nakamura</i>	260
Curves, Hypersurfaces, and Good Pairs of Adjacency Relations <i>Valentin E. Brimkov, Reinhard Klette</i>	276

A Maximum Set of (26,6)-Connected Digital Surfaces <i>J.C. Ciria, A. De Miguel, E. Domínguez, A.R. Francés, A. Quintero</i>	291
Simple Points and Generic Axiomatized Digital Surface-Structures <i>Sébastien Fourey</i>	307
Minimal Non-simple Sets in 4-Dimensional Binary Images with (8,80)-Adjacency <i>T. Yung Kong, Chyi-Jou Gau</i>	318
Jordan Surfaces in Discrete Antimatroid Topologies <i>Ralph Kopperman, John L. Pfaltz</i>	334
How to Find a Khalimsky-Continuous Approximation of a Real-Valued Function <i>Erik Melin</i>	351
Digital Geometry	
Algorithms in Digital Geometry Based on Cellular Topology <i>V. Kovalevsky</i>	366
An Efficient Euclidean Distance Transform <i>Donald G. Bailey</i>	394
Two-Dimensional Discrete Morphing <i>Isameddine Boukhriss, Serge Miguet, Laure Tougne</i>	409
A Comparison of Property Estimators in Stereology and Digital Geometry <i>Yuman Huang, Reinhard Klette</i>	421
Thinning by Curvature Flow <i>Atushi Imiya, Masahiko Saito, Kiwamu Nakamura</i>	432
Convex Functions on Discrete Sets <i>Christer O. Kiselman</i>	443
Discrete Surface Segmentation into Discrete Planes <i>Isabelle Sivignon, Florent Dupont, Jean-Marc Chassery</i>	458

Approximation of Digital Sets by Curves and Surfaces

Sketch-Based Shape Retrieval Using Length and Curvature of 2D Digital Contours <i>Abdolah Chalechale, Golshah Naghdy, Prashan Premaratne</i>	474
Surface Smoothing for Enhancement of 3D Data Using Curvature-Based Adaptive Regularization <i>Hyunjong Ki, Jeongho Shin, Junghoon Jung, Seongwon Lee, Joonki Paik</i>	488
Minimum-Length Polygon of a Simple Cube-Curve in 3D Space <i>Fajie Li, Reinhard Klette</i>	502
Corner Detection and Curve Partitioning Using Arc-Chord Distance <i>Majed Marji, Reinhard Klette, Pepe Sny</i>	512
Shape Preserving Sampling and Reconstruction of Grayscale Images <i>Peer Stelldinger</i>	522

Algebraic Approaches

Comparison of Nonparametric Transformations and Bit Vector Matching for Stereo Correlation <i>Bogusław Cyganek</i>	534
Exact Optimization of Discrete Constrained Total Variation Minimization Problems <i>Jérôme Darbon, Marc Sigelle</i>	548
Tensor Algebra: A Combinatorial Approach to the Projective Geometry of Figures <i>David N.R. McKinnon, Brian C. Lovell</i>	558
Junction and Corner Detection Through the Extraction and Analysis of Line Segments <i>Christian Perwass</i>	568
Geometric Algebra for Pose Estimation and Surface Morphing in Human Motion Estimation <i>Bodo Rosenhahn, Reinhard Klette</i>	583

Fuzzy Image Analysis

- A Study on Supervised Classification of Remote Sensing Satellite Image
by Bayesian Algorithm Using Average Fuzzy Intracluster Distance
Young-Joon Jeon, Jae-Gark Choi, Jin-Il Kim 597
- Tree Species Recognition with Fuzzy Texture Parameters
Ralf Reulke, Norbert Haala 607

Image Segmentation

- Fast Segmentation of High-Resolution Satellite Images Using Watershed
Transform Combined with an Efficient Region Merging Approach
Qiuxiao Chen, Chenghu Zhou, Jiancheng Luo, Dongping Ming 621
- Joint Non-rigid Motion Estimation and Segmentation
Boris Flach, Radim Sara 631
- Sequential Probabilistic Grass Field Segmentation of Soccer Video
Images
Kaveh Kangarloo, Ehsanollah Kabir 639
- Adaptive Local Binarization Method for Recognition of Vehicle
License Plates
*Byeong Rae Lee, Kyungsoo Park, Hyunchul Kang, Haksoo Kim,
Chungkyue Kim* 646
- Blur Identification and Image Restoration Based on Evolutionary
Multiple Object Segmentation for Digital Auto-focusing
*Jeongho Shin, Sunghyun Hwang, Kiman Kim, Jinyoung Kang,
Seongwon Lee, Joonki Paik* 656
- Performance Evaluation of Binarizations of Scanned Insect Footprints
Young W. Woo 669

Matching and Recognition

- 2D Shape Recognition Using Discrete Wavelet Descriptor Under
Similitude Transform
Kimcheng Kith, El-hadi Zahzah 679

Which Stereo Matching Algorithm for Accurate 3D Face Creation? <i>Ph. Leclercq, J. Liu, A. Woodward, P. Delmas</i>	690
Video Cataloging System for Real-Time Scene Change Detection of News Video <i>Wanjoo Lee, Hyoki Kim, Hyunchul Kang, Jinsung Lee, Yongkyu Kim, Seokhee Jeon</i>	705
Automatic Face Recognition by Support Vector Machines <i>Huaqing Li, Shaoyu Wang, Feihu Qi</i>	716
Practical Region-Based Matching for Stereo Vision <i>Brian McKinnon, Jacky Baltés</i>	726
Video Program Clustering Indexing Based on Face Recognition Hybrid Model of Hidden Markov Model and Support Vector Machine <i>Yuehua Wan, Shiming Ji, Yi Xie, Xian Zhang, Peijun Xie</i>	739
Texture Feature Extraction and Selection for Classification of Images in a Sequence <i>Khin Win, Sung Baik, Ran Baik, Sung Ahn, Sang Kim, Yung Jo</i>	750
Author Index	759