

[Advanced Search](#)
[Home](#) | [Digital Library](#) | [Site Map](#) | [Store](#) | [Contact Us](#) | [Press Room](#) | [Shopping Cart](#) | [Help](#) | [Login](#) |

digital library

DIGITAL LIBRARY HOME

[BROWSE BY TITLE](#)
[BROWSE BY SUBJECT](#)
[SEARCH](#)
[LIBRARY/INSTITUTION RESOURCES](#)
[RESOURCES](#)
[SUBSCRIPTION](#)
[ABOUT THE DIGITAL LIBRARY](#)
[Archive Page >>](#) [Table of Contents](#)

18th International Conference on Pattern Recognition (ICPR'06)

Introduction

Message from the ICPR2006 General Co-Chairs (PDF)

p. XXV

[ABSTRACT](#) [PDF](#)

Message from the President of IAPR (PDF)

p. XXVI

[ABSTRACT](#) [PDF](#)

ICPR2006 Organizing Committee (PDF)

p. XXVII

[ABSTRACT](#) [PDF](#)

ICPR2006 Technical Chairs (PDF)

p. XXVIII

[ABSTRACT](#) [PDF](#)

ICPR2006 Program Committee (PDF)

p. XXIX

[ABSTRACT](#) [PDF](#)

ICPR2006 Additional Reviewers (PDF)

p. XXXV

[ABSTRACT](#) [PDF](#)

IAPR Member Societies and Members of the Governing Board (PDF)

p. XXXVI

Download Issue Citations

[Ascii Text](#)
[BibTex](#)
[Refworks](#)
[Procite/RefMan/Endnote](#)

Free access to

- Abstracts
- Selected PDFs

Electronic subscribers log in to

- Access HTML/PDFs of full text articles
- Download full issue (ZIP of PDFs)

[Subscription information](#)
[Get a Web account](#)
[Peer Review Notice](#)
[Give us Feedback](#)

 ABSTRACT  PDF**IAPR Standing Committees**
(PDF)

p. xxxvii

 ABSTRACT  PDF**IAPR Technical Committees**
(PDF)

p. xxxviii

 ABSTRACT  PDF**Track I: Computer Vision and Image Analysis****Wed-O-I-1: Stereo and Motion II****Dense Estimation of Layer Motions in the Atmosphere**

(Abstract)

Patrick Heas, IRISA, Universite de Rennes 1, 35042 Rennes Cedex, FRANCE

Etienne Memin, IRISA, Universite de Rennes 1, 35042 Rennes Cedex, FRANCE

Nicolas Papadakis, IRISA, Universite de Rennes 1, 35042 Rennes Cedex, FRANCE

pp. 1-4

 ABSTRACT  PDF  BUY ARTICLE**Motion from Focus** (Abstract)

Huynh Quang Huy Viet, Ritsumeikan University

Makoto Sato, Tokyo Institute of Technology

Hiromi T. Tanaka, Ritsumeikan University

pp. 5-10

 ABSTRACT  PDF  BUY ARTICLE**Structural flow smoothing for shape interpolation** (Abstract)

Ashish Doshi, University of York, York YO10 5DD, UK

Adrian G. Bors, University of York, York YO10 5DD, UK

pp. 11-14

 ABSTRACT  PDF  BUY ARTICLE**Segment-Based Stereo Matching Using Belief Propagation and a Self-**

Adapting Dissimilarity**Measure (Abstract)**

Andreas Klaus, VRVis Research Center, Graz, Austria
Mario Sormann, VRVis Research Center, Graz, Austria
Konrad Karner, VRVis Research Center, Graz, Austria

pp. 15-18

**Wed-O-I-2: Object Detection and Recognition****Object Detection with Adaptive Background Model and Margined Sign Cross Correlation (Abstract)**

Hironori Yoshimura, Osaka University
Yoshio Iwai, Osaka University
Masahiko Yachida, Osaka University

pp. 19-23

**Convex Quadratic Programming for Object Localization (Abstract)**

Hao Jiang, Simon Fraser University, Burnaby BC, Canada
Mark S. Drew, Simon Fraser University, Burnaby BC, Canada
Ze-Nian Li, Simon Fraser University, Burnaby BC, Canada

pp. 24-27

**Real-time Object Recognition using Relational Dependency based on Graphical Model (Abstract)**

Woo-han Yun, Intelligent Robot Research Division, Korea
Sung Yang Bang, Pohang University of Science and Technology, Korea
Daijin Kim, Pohang University of Science and Technology, Korea

pp. 28-32

**Tensor Discriminant Analysis for View-based Object Recognition (Abstract)**

Yong Wang, Queen Mary, University of London, E1 4NS, United Kingdom
Shaogang Gong, Queen Mary, University of London, E1 4NS, United Kingdom

pp. 33-36



ABSTRACT



PDF



BUY ARTICLE

Wed-O-I-3a: Tracking

Robust Visual Tracking via Pixel Classification and Integration (Abstract)

Cha Zhang, Microsoft Research, One Microsoft Way, Redmond, WA
Yong Rui, Microsoft Research, One Microsoft Way, Redmond, WA

pp. 37-42



ABSTRACT



PDF



BUY ARTICLE

A Target Dependent Colorspace for Robust Tracking (Abstract)

Francesc Moreno-Noguer, Institut de Robotica i Inform`atica, UPC-CSIC, Barcelona, Spain
Alberto Sanfeliu, Institut de Robotica i Inform`atica, UPC-CSIC, Barcelona, Spain
Dimitris Samaras, Computer Science Department SUNY Stony Brook, NY 11794-4400, USA

pp. 43-46



ABSTRACT



PDF



BUY ARTICLE

Robust Appearance-based Tracking using a sparse Bayesian classifier (Abstract)

Shu-Fai Wong, University of Cambridge
Kwan-Yee Kenneth Wong, Hong Kong University
Roberto Cipolla, University of Cambridge

pp. 47-50



ABSTRACT



PDF



BUY ARTICLE

Multiple Human Objects Tracking in Crowded Scenes

(Abstract)

Yao-Te Tsai, National Tsing Hua University
Huang-Chia Shih, National Tsing Hua University
Chung-Lin Huang, National Tsing Hua University

pp. 51-54



ABSTRACT



PDF



BUY ARTICLE

Multi-User Natural Interaction System based on Real-Time Hand Tracking and Gesture Recognition (Abstract)
Alberto Del Bimbo, University of Florence, Italy
Lea Landucci, University of Florence, Italy
Alessandro Valli, University of Florence, Italy

pp. 55-58



Efficient Tracking in 6-DoF based on the Image-Constancy Assumption in 3-D (Abstract)

Wolfgang Sepp, Institute of Robotics and Mechatronics German Aerospace Center (DLR), Germany

pp. 59-62



Wed-O-I-3b: Video Analysis and Tracking

Video Completion for Perspective Camera Under Constrained Motion (Abstract)
Yuping Shen, University of Central Florida
Fei Lu, University of Central Florida
Xiaochun Cao, University of Central Florida
Hassan Foroosh, University of Central Florida

pp. 63-66



Video Local Pattern based Image Matching for Visual Mapping (Abstract)
Lei Wang, Australia National University, Australia
Hongdong Li, Australia National University, Australia
Richard Hartley, Australia National University, Australia

pp. 67-70



Video Synchronization Based on Co-occurrence of Appearance Changes in Video Sequences (Abstract)
Manabu Ushizaki, Tohoku University, Japan

Takayuki Okatani, Tohoku University,
Japan
Kochiro Deguchi, Tohoku University,
Japan

pp. 71-74



Robust Segmentation of Hidden Layers in Video Sequences (Abstract)

Romain Dupont, CERTIS Laboratory,
Ecole des Ponts, Paris, France
Olivier Juan, CERTIS Laboratory,
Ecole des Ponts, Paris, France
Renaud Keriven, CERTIS Laboratory,
Ecole des Ponts, Paris, France

pp. 75-78



Multiple Object Tracking Using Local PCA (Abstract)

Csaba Beleznai, Advanced Computer Vision GmbH - ACV Vienna, Austria
Bernhard Fruhwert, Siemens AG Austria
Horst Bischof, Graz University of Technology, Graz, Austria

pp. 79-82



Discriminative Descriptor-Based Observation Model for Visual Tracking (Abstract)

Wen-Yan Chang, Academia Sinica, Taipei, Taiwan
Chu-Song Chen, National Taiwan University, Taiwan
Yi-Ping Hung, National Taiwan University, Taiwan

pp. 83-86



Track II: Pattern Recognition and Basic Technologies

Wed-O-II-1a: Pattern Detection

Novel Adaptive Nearest Neighbor Classifiers Based On Hit-Distance (Abstract)

Zhen Lou, Nanjing Univ. of Science and Technology, China
Zhong Jin, Universitat Autonoma de Barcelona Barcelona 08193, Spain

pp. 87-90



Emotional Speech Analysis on Nonlinear Manifold (Abstract)

Mingyu You, ZheJiang University,
Hangzhou, P.R.CHINA
Chun Chen, ZheJiang University,
Hangzhou, P.R.CHINA
Jiajun Bu, ZheJiang University,
Hangzhou, P.R.CHINA
Jia Liu, ZheJiang University,
Hangzhou, P.R.CHINA
Jianhua Tao, Chinese Academy of Sciences, Beijing, CHINA

pp. 91-94

**Object Localization Using Input/Output Recursive Neural Networks (Abstract)**

Monica Bianchini, DII - Universitli degli Studi di Siena Via Roma, 56 - 53100 Siena - Italy
Marco Maggini, DII - Universitli degli Studi di Siena Via Roma, 56 - 53100 Siena - Italy
Lorenzo Sarti, DII - Universitli degli Studi di Siena Via Roma, 56 - 53100 Siena - Italy

pp. 95-98

**A Maximum-Likelihood Approach to Symbolic Indirect Correlation (Abstract)**

Ashutosh Joshi, Rensselaer Polytechnic Institute,Troy, NY
George Nagy, Rensselaer Polytechnic Institute,Troy, NY
Daniel Lopresti, Lehigh Univ.
Bethlehem, PA
Sharad Seth, Univ. of Nebraska,
Lincoln, NE

pp. 99-103

**Basic Concepts For Testing The Torah Code Hypothesis (Abstract)**

Robert M. Haralick, City University of New York

pp. 104-109

**Testing The Torah Code Hypothesis: The Experimental Protocol (Abstract)**

Robert M. Haralick, City University of

New York

pp. 110-115



ABSTRACT



PDF



BUY ARTICLE

Wed-O-II-1b: Pattern Matching Methods I

A Model-based Approach for Rigid Object Recognition

(Abstract)

Chee Boon Chong, Curtin University of Technology, Perth, Western Australia

Tele Tan, Curtin University of Technology, Perth, Western Australia

Fee Lee Lim, Curtin University of Technology, Perth, Western Australia

pp. 116-120



ABSTRACT



PDF



BUY ARTICLE

A Unified Formulation of Invariant Point Pattern Matching

(Abstract)

Tiberio S. Caetano, National ICT Australia and Australian National University, Canberra , Australia

Terry Caelli, National ICT Australia and Australian National University, Canberra , Australia

pp. 121-124



ABSTRACT



PDF



BUY ARTICLE

Efficient Feature Extraction Based on Regularized Uncorrelated Chernoff Discriminant Analysis

(Abstract)

A. K. Qin, Nanyang Technological University, Singapore

P. N. Suganthan, Nanyang Technological University, Singapore

M. Loog, The Image Group, IT University of Copenhagen, Denmark

pp. 125-128



ABSTRACT



PDF



BUY ARTICLE

Minimum Enclosing and Maximum Excluding Machine for Pattern Description and Discrimination

(Abstract)

Yi Liu, Ohio State University, Columbus, Ohio

Yuan F. Zheng, Ohio State University, Columbus, Ohio

pp. 129-132



**Graph Matching using
Interference of Coined
Quantum Walks** (Abstract)

David Emms, University of York
Edwin Hancock, University of York
Richard Wilson, University of York

pp. 133-136



**Dissimilarity-based
classification for vectorial
representations** (Abstract)

Elżbieta Pekalska, School of
Computer Science, University of
Manchester
Robert P.W. Duin, Delft University of
Technology, The Netherlands

pp. 137-140



**Wed-P-II-1: Advances in Basic
Methodology II**

**Scale Invariants of Three-
Dimensional Legendre
Moments** (Abstract)

Lee-Yeng Ong, Multimedia University,
Malaysia
Chee-Way Chong, Multimedia
University, Malaysia
Rosli Besar, Multimedia University,
Malaysia

pp. 141-144



**An Interweaved HMM/DTW
Approach to Robust Time
Series Clustering** (Abstract)

Jianying Hu, IBM T.J.Watson Research
Center, Yorktown Heights, NY
Bonnie Ray, IBM T.J.Watson Research
Center, Yorktown Heights, NY
Lanshan Han, Rensselaer Polytechnic
Institute, 110 8th Street, Troy, NY

pp. 145-148



**Patterns of Co-Linear
Equidistant Letter Sequences
and Verses** (Abstract)

Nachum Bombach, Economist Certified
Public Accountant Ramat Gan, Israel
Harold Gans, U.S. Department of

Defense Fort George G. Meade,
Maryland, U.S.A.

pp. 149-151



ABSTRACT



PDF



BUY ARTICLE

Experimental Comparison of Combination Rules using Simulated Data (Abstract)

Hela Zouari, Universite de Rouen, F-76800 Saint-Etienne-du-Rouvray, France

Laurent Heutte, Universite de Rouen, F-76800 Saint-Etienne-du-Rouvray, France

Yves Lecourtier, Universite de Rouen, F-76800 Saint-Etienne-du-Rouvray, France

pp. 152-155



ABSTRACT



PDF



BUY ARTICLE

Comparative Classifier Aggregation (Abstract)

Ahmad Abdulkader, Microsoft Corporation One Microsoft Way, Redmond, WA

John A. Drakopoulos, Microsoft Corporation One Microsoft Way, Redmond, WA

Qi Zhang, Microsoft Corporation One Microsoft Way, Redmond, WA

pp. 156-159



ABSTRACT



PDF



BUY ARTICLE

Object Detection Based on Combination of Conditional Random Field and Markov Random Field (Abstract)

Ping Zhong, ATR Lab., National University of Defense Technology, Changsha, Hunan, 410073, China
Runsheng Wang, ATR Lab., National University of Defense Technology, Changsha, Hunan, 410073, China

pp. 160-163



ABSTRACT



PDF



BUY ARTICLE

CAPTCHA Challenge Tradeoffs: Familiarity of Strings versus Degradation of Images (Abstract)

Sui-Yu Wang, Lehigh University, Bethlehem, PA, USA

Jon L. Bentley, Avaya Labs Research, Basking Ridge, NJ, USA

pp. 164-167



ABSTRACT



PDF



BUY ARTICLE

A probabilistic model with parsimonious representation for sensor fusion in recognizing activity in pervasive environment
(Abstract)

Dung T. Tran, Curtin University of Technology, Western Australia
Dinh Q. Phung, Curtin University of Technology, Western Australia

pp. 168-172



The Hidden Birth Dates of Personalities of Genesis

(Abstract)
Doron Witztum

pp. 173-176



Incremental Construction of Neighborhood Graphs for Nonlinear Dimensionality Reduction (Abstract)

Dongfang Zhao, Western Michigan University
Li Yang, Western Michigan University

pp. 177-180



Non-overlapping Distributed Tracking using Particle Filter

(Abstract)
Wilson Leoputra, Curtin University of Technology, Perth, Western Australia
Tele Tan, Curtin University of Technology, Perth, Western Australia
Fee Lee Lim, Curtin University of Technology, Perth, Western Australia

pp. 181-185



Protein Fold Recognition using a Structural Hidden Markov Model (Abstract)

D. Bouchaffra, Oakland University Rochester, MI
J. Tan, Oakland University Rochester, MI

pp. 186-189



A Novel Approach to Very Fast and Noise Robust,Isolated Word Speech Recognition (Abstract)

Ramin Halavati, Sharif University of Technology, Tehran, Iran
Saeed Bagheri Shouraki, Sharif University of Technology, Tehran, Iran
Hossein Tajik, Sharif University of Technology, Tehran, Iran
Arpineh Cholakian, Sharif University of Technology, Tehran, Iran
Mina Razaghpour, Sharif University of Technology, Tehran, Iran

pp. 190-193

**Separating Reflections from Images Using Kernel Independent Component Analysis (Abstract)**

Masaki Yamazaki, Ritsumeikan University
Yen-Wei Chen, Ritsumeikan University
Gang Xu, Ritsumeikan University

pp. 194-197

**A Generalized K-Means Algorithm with Semi-Supervised Weight Coefficients (Abstract)**

Fujiki Morii, Nara Women's University, Nara 630-8506, Japan

pp. 198-201

**Human Behavior Recognition with Generic Exponential Family Duration Modeling in the Hidden Semi-Markov Model (Abstract)**

Thi V. Duong, Curtin University of Technology, Perth, WA
Dinh Q. Phung, Curtin University of Technology, Perth, WA
Hung H. Bui, Curtin University of Technology, Perth, WA
Svetlana Venkatesh, Curtin University of Technology, Perth, WA

pp. 202-207

**Extraction of Consistent Subsets of Descriptors using**

Choquet Integral (Abstract)

Jan Rendek, France Telecom R&D and
LORIA, CEDEX, France
Laurent Wendling, LORIA-Universite
de Nancy I, CEDEX, France

pp. 208-211

**Statistical Borders for
Incremental Mining (Abstract)**

Richard Nock, Universite Antilles-
Guyane, 97275 Schoelcher,
Martinique,France
Pierre-Alain Laur, Universite Antilles-
Guyane, 97275 Schoelcher,
Martinique,France
Jean-Emile Symphor, Universite
Antilles-Guyane, 97275 Schoelcher,
Martinique,France

pp. 212-215

**A fast binary-image
comparison method with
local-dissimilarity
quantification (Abstract)**

Etienne Baudrier, Laboratoire
CReSTIC, IUT de Troyes, 9, rue de
Qu'ebec, 10026 TROYES CEDEX,
France
Gilles Millon, Laboratoire CReSTIC,
IUT de Troyes, 9, rue de Qu'ebec,
10026 TROYES CEDEX, France
Frederic Nicolier, Laboratoire
CReSTIC, IUT de Troyes, 9, rue de
Qu'ebec, 10026 TROYES CEDEX,
France
Su Ruan, Laboratoire CReSTIC, IUT
de Troyes, 9, rue de Qu'ebec, 10026
TROYES CEDEX, France

pp. 216-219

**Ball Hit Detection in Table
Tennis Games Based on Audio
Analysis (Abstract)**

Bin Zhang, Tsinghua University,
Beijing, China
Weibei Dou, Tsinghua University,
Beijing, China
Liming Chen, LIRIS CNRS UMR 5205
Ecole Centrale de Lyon , France

pp. 220-223

**A two-stage outlier rejection
strategy for numerical field
extraction in handwritten**

documents (Abstract)

Clement Chatelain, Laboratoire LITIS,
76800 Saint Etienne du Rouvray,
FRANCE
Laurent Heutte, Laboratoire LITIS,
76800 Saint Etienne du Rouvray,
FRANCE
Thierry Paquet, Laboratoire LITIS,
76800 Saint Etienne du Rouvray,
FRANCE

pp. 224-227



ABSTRACT



PDF



BUY ARTICLE

A Time Warping Based Approach for Video Copy Detection (Abstract)

Chih-Yi Chiu, Institute of Information Science, Academia Sinica, Taiwan
Cheng-Hung Li, Institute of Information Science, Academia Sinica, Taiwan
Hsiang-An Wang, Institute of Information Science, Academia Sinica, Taiwan
Chu-Song Chen, Institute of Information Science, Academia Sinica, Taiwan
Lee-Feng Chien, Institute of Information Science, Academia Sinica, Taiwan

pp. 228-231



ABSTRACT



PDF



BUY ARTICLE

Local Behaviours Labelling for Content Based Video Copy Detection (Abstract)

Julien Law-To, INA / INRIA, France
Valerie Gouet-Brunet, INRIA
Rocquencourt, France
Olivier Buisson, INA, France
Nozha Boujemaa, INRIA
Rocquencourt, France

pp. 232-235



ABSTRACT



PDF



BUY ARTICLE

Statistical Model for the Classification of the Wavelet Transforms of T-ray Pulses (Abstract)

X.X. Yin, University of Adelaide, SA 5005, Australia
B.W.-H. Ng, University of Adelaide, SA 5005, Australia
B. Ferguson, University of Adelaide, SA 5005, Australia
S.P. Mickan, University of Adelaide, SA 5005, Australia
D. Abbott, University of Adelaide, SA 5005, Australia

pp. 236-239



Efficient Cross-validation of the Complete Two Stages in KFD Classifier Formulation

(Abstract)

Senjian An, Curtin University of Technology, WA 6102, Australia
Wanquan Liu, Curtin University of Technology, WA 6102, Australia
Svetha Venkatesh, Curtin University of Technology, WA 6102, Australia

pp. 240-244



Regularity and Complexity of Human Electroencephalogram Dynamics: Applications to Diagnosis of Alzheimers Disease

(Abstract)
Zhenghui Hu, Hong Kong University of Science and Technology, Kowloon, Hong Kong
Pengcheng Shi, Southern Medical University, Guangzhou, China

pp. 245-248



A Combination of Generative and Discriminative Approaches to Object Detection

(Abstract)
Junyeong Yang, Yonsei University, Seoul, Korea
Hyeran Byun, Yonsei University, Seoul, Korea

pp. 249-253



Class Separability in Spaces Reduced By Feature Selection

(Abstract)

Erinija Pranckeviciene, Institute for Biodiagnostics, National Research Council Canada
TinKam Ho, Institute for Biodiagnostics, National Research Council Canada
Ray Somorjai, Institute for Biodiagnostics, National Research Council Canada

pp. 254-257



Traffic Prediction Using Ying-

Yang Fuzzy Cerebellar Model Articulation Controller

(Abstract)

M.N Nguyen, Nanyang Technological University, Singapore
D. Shi, Nanyang Technological University, Singapore
C. Quek, Nanyang Technological University, Singapore
G. S. Ng, Nanyang Technological University, Singapore

pp. 258-261



ABSTRACT



PDF



BUY ARTICLE

P-Channels: Robust Multivariate M-Estimation of Large Datasets (Abstract)

Michael Felsberg, Linkoping University
Gosta Granlund, Linkoping University

pp. 262-267



ABSTRACT



PDF



BUY ARTICLE

Improving Text Classifier Performance based on AUC

(Abstract)

Alex K. S. Wong, Hong Kong Polytechnic University
John W. T. Lee, Hong Kong Polytechnic University
Daniel S. Yeung, Hong Kong Polytechnic University

pp. 268-271



ABSTRACT



PDF



BUY ARTICLE

Incremental Vehicle 3-D Modeling from Video (Abstract)

N. Ghosh, University of California, Riverside, CA
B. Bhanu, University of California, Riverside, CA

pp. 272-275



ABSTRACT



PDF



BUY ARTICLE

Illumination Invariant**Texture Retrieval (Abstract)**

Michal Haindl, Academy of Sciences CR, 182 08 Prague, Czech Republic
Pavel Vacha, Academy of Sciences CR, 182 08 Prague, Czech Republic

pp. 276-279



ABSTRACT



PDF



BUY ARTICLE

A Coupon Classification Method Based on Adaptive

Image Vector Matching

(Abstract)

Takeshi Nagasaki, Hitachi, Ltd.,
Central Research Laboratory, Japan
Katsumi Marukawa, Hitachi, Ltd.,
Central Research Laboratory, Japan
Tatsuhiko Kagehiro, Hitachi, Ltd.,
Central Research Laboratory, Japan
Hiroshi Sako, Hitachi, Ltd., Central
Research Laboratory, Japan

pp. 280-283



ABSTRACT



PDF



BUY ARTICLE

Ethiopic Character**Recognition Using Direction
Field Tensor (Abstract)**

Yaregal Assabie, Halmstad University,
SE-301 18 Halmstad, Sweden
Josef Bigun, Halmstad University, SE-
301 18 Halmstad, Sweden

pp. 284-287



ABSTRACT



PDF



BUY ARTICLE

**Recognition of lung lobes and
its application to the
bronchial structure analysis**

(Abstract)

Takayuki Kitasaka, Nagoya University,
Japan
Yuichi Nakada, Nagoya University,
Japan
Kensaku Mori, Nagoya University,
Japan
Yasuhide Suenaga, Nagoya University,
Japan
Masaki Mori, Sapporo Kosei General
Hospital, Japan
Hirotugu Takabatake, Sapporo
Minami-Sanjo Hospital, Japan
Hiroshi Natori, Sapporo Medical
University, Japan

pp. 288-291



ABSTRACT



PDF



BUY ARTICLE

**A Markovian Approach for
Handwritten Document
Segmentation (Abstract)**

Stéphane Nicolas, Laboratoire LITIS -
Université de Rouen, cedex, FRANCE
Thierry Paquet, Laboratoire LITIS -
Université de Rouen, cedex, FRANCE
Laurent Heutte, Laboratoire LITIS -
Université de Rouen, cedex, FRANCE

pp. 292-295



ABSTRACT



PDF



BUY ARTICLE

**Graph Classification Using
Genetic Algorithm and Graph**

Probing Application to Symbol Recognition (Abstract)

Eugen Barbu, LITIS Labs - University of Rouen, FRANCE
Romain Raveaux, LITIS Labs - University of Rouen, FRANCE
Herve Locteau, LITIS Labs - University of Rouen, FRANCE
Sebastien Adam, LITIS Labs - University of Rouen, FRANCE
Pierre Heroux, LITIS Labs - University of Rouen, FRANCE
Eric Trupin, LITIS Labs - University of Rouen, FRANCE

pp. 296-299



ABSTRACT



PDF



BUY ARTICLE

Comparing rank-inducing scoring systems (Abstract)

Narayan L. Bhamidipati, Machine Intelligence Unit, Indian Statistical Institute, Kolkata
Sankar K. Pal, Machine Intelligence Unit, Indian Statistical Institute, Kolkata

pp. 300-303



ABSTRACT



PDF



BUY ARTICLE

LIGHT: Local Invariant Generalized Hough Transform (Abstract)

Jose A.R. Artolazabal, University of Surrey, UK
John Illingworth, University of Surrey, UK
Alberto S. Aguado, University of Surrey, UK

pp. 304-307



ABSTRACT



PDF



BUY ARTICLE

Comparison of Structural Variables with Spatio-temporal Variables Concerning the Identifiability of Okuri Class and Player in Japanese Traditional Dancing (Abstract)

Mitsu Yoshimura, Ritsumeikan University, Japan
Kozaburo Hachimura, Ritsumeikan University, Japan
Yuuka Marumo, Ritsumeikan University, Japan

pp. 308-311



ABSTRACT



PDF



BUY ARTICLE

Real Time Large Vocabulary Continuous Sign Language

Recognition Based on OP/Viterbi Algorithm

(Abstract)

Guilin Yao, Harbin Institute of Technology, Harbin, China
Hongxun Yao, Harbin Institute of Technology, Harbin, China
Xin Liu, Harbin Institute of Technology, Harbin, China
Feng Jiang, Harbin Institute of Technology, Harbin, China

pp. 312-315



ABSTRACT



PDF



BUY ARTICLE

Efficient Relevance Feedback Using Semi-supervised Kernel-specified K-means Clustering (Abstract)

Bo QIU, Institute for Infocomm (I2R), Singapore
Chang Sheng XU, Institute for Infocomm (I2R), Singapore
Qi TIAN, Institute for Infocomm (I2R), Singapore

pp. 316-319



ABSTRACT



PDF



BUY ARTICLE

A Novel Pattern Classification Scheme: Classwise Non-Principal Component Analysis (CNPCA) (Abstract)

Guorong Xuan, Tongji University, Shanghai, China
Peiqi Chai, Tongji University, Shanghai, China
Xiuming Zhu, Tongji University, Shanghai, China
Qiuming Yao, Tongji University, Shanghai, China
Cong Huang, Tongji University, Shanghai, China
Yun Q. Shi, New Jersey Institute of Technology, USA
Dongdong Fu, New Jersey Institute of Technology, USA

pp. 320-323



ABSTRACT



PDF



BUY ARTICLE

Semi-Parametric Model-Based Clustering for DNA Microarray Data (Abstract)

Bohyung Han, Samsung Information Systems America Irvine, CA
Larry S. Davis, University of Maryland College Park, MD

pp. 324-327



ABSTRACT



PDF



BUY ARTICLE

Local Discriminant Analysis

(Abstract)

Marco Loog, Image Group, IT
University of Copenhagen
Copenhagen, Denmark
Dick de Ridder, Delft University of
Technology, Delft, The Netherlands

pp. 328-331



ABSTRACT



PDF



BUY ARTICLE

Predicting the benefit of sample size extension in multiclass k-NN classification

(Abstract)

Christian Kier, University of Luebeck
Til Aach, RWTH Aachen University,
Germany

pp. 332-335



ABSTRACT



PDF



BUY ARTICLE

Rotation-Invariant**Neoperceptron** (Abstract)

Beat Fasel, BIWI, ETH Zurich Zurich,
Switzerland
Daniel Gatica-Perez, IDIAP Research
Institute Martigny, Switzerland

pp. 336-339



ABSTRACT



PDF



BUY ARTICLE

A Template-Matching Approach for Protein Surface Clustering (Abstract)

L. Baldacci, DEIS, University of
Bologna, Viale Risorgimento 2, 40136
Bologna, Italy
M. Golfarelli, DEIS, University of
Bologna, Viale Risorgimento 2, 40136
Bologna, Italy
A. Lumini, DEIS, University of
Bologna, Viale Risorgimento 2, 40136
Bologna, Italy
S. Rizzi, DEIS, University of Bologna,
Viale Risorgimento 2, 40136 Bologna,
Italy

pp. 340-343



ABSTRACT



PDF



BUY ARTICLE

Summarization of JBIG2 Compressed Indian Language Textual Images (Abstract)

Utpal Garain, Indian Statistical
Institute, 203, B. T. Road, Kolkata
700108, India
Alok K. Datta, Indian Statistical
Institute, 203, B. T. Road, Kolkata
700108, India
U. Bhattacharya, Indian Statistical
Institute, 203, B. T. Road, Kolkata

700108, India
S. K. Parui, Indian Statistical
Institute, 203, B. T. Road, Kolkata
700108, India

pp. 344-347



Pen-Coordinate Information Modeling by SCPR-based HMM for On-line Japanese Handwriting Recognition

(Abstract)

Junko Tokuno, Tokyo University of
Agriculture and Technology, Koganei,
Tokyo, Japan

Yiping Yang, Tokyo University of
Agriculture and Technology, Koganei,
Tokyo, Japan

Gleidson Pegoretti da Silva, Tokyo
University of Agriculture and

Technology, Koganei, Tokyo, Japan

Akihito Kitadai, Tokyo University of
Agriculture and Technology, Koganei,
Tokyo, Japan

Masaki Nakagawa, Tokyo University of
Agriculture and Technology, Koganei,
Tokyo, Japan

pp. 348-351



Scalable Representative Instance Selection and Ranking (Abstract)

Xingquan Zhu, University of Vermont,
VT

Xindong Wu, University of Vermont,
VT

pp. 352-355



Learning Policies for Efficiently Identifying Objects of Many Classes (Abstract)

Ramana Isukapalli, Lucent
Technologies, Bell Labs Innovations
Whippany, NJ
Ahmed Elgammal, Rutgers University,
NJ

pp. 356-361



Image Classification for Genetic Diagnosis using Fuzzy ARTMAP (Abstract)

Boaz Lerner, Ben-Gurion University,
Beer-Sheva, Israel
Boaz Vigdor, Ben-Gurion University,
Beer-Sheva, Israel

pp. 362-365



ABSTRACT



PDF



BUY ARTICLE

Fast Support Vector Machine Classification using linear SVMs (Abstract)

Karina Zapien Arreola, INSA de Rouen LITIS, France
Janis Fehr, University of Freiburg, Germany
Hans Burkhardt, University of Freiburg, Germany

pp. 366-369



ABSTRACT



PDF



BUY ARTICLE

A Novel Approach for Lexical Noise Analysis and Measurement in Intelligent Information Retrieval

(Abstract)

T. Jaber, Queen's University, Belfast, UK
A. Amira, Brunel University, West London, Uxbridge, UK
P. Milligan, Queen's University, Belfast, UK

pp. 370-373



ABSTRACT



PDF



BUY ARTICLE

Bayesian Feedback in Data Clustering (Abstract)

A. K. Jain, Michigan State University, East Lansing, MI
Pavan K. Mallapragada, Michigan State University, East Lansing, MI
Martin Law, Michigan State University, East Lansing, MI

pp. 374-378



ABSTRACT



PDF



BUY ARTICLE

Learning Mixtures of Offline and Online features for Handwritten Stroke Recognition (Abstract)

Karteek Alahari, Centre for Visual Information Technology, IIIT Hyderabad, INDIA.
Satya Lahari Putrevu, Centre for Visual Information Technology, IIIT Hyderabad, INDIA.
C. V. Jawahar, Centre for Visual Information Technology, IIIT Hyderabad, INDIA.

pp. 379-382



ABSTRACT



PDF



BUY ARTICLE

Perceptual Audio Watermarking by Learning in Wavelet Domain (Abstract)
Bilge Gunsel, Istanbul Technical Univ., Turkey
Serap Kirbiz, Istanbul Technical Univ., Turkey

pp. 383-386



A new method to detect arcs and segments from curvature profiles (Abstract)

J.-P. Salmon, LORIA, Campus scientifique, BP 239, Vandoeuvre-les-Nancy Cedex France
I. Debled-Rennesson, LORIA, Campus scientifique, BP 239, Vandoeuvre-les-Nancy Cedex France
L. Wendling, LORIA, Campus scientifique, BP 239, Vandoeuvre-les-Nancy Cedex France

pp. 387-390



A Trainable Similarity Measure for Image Classification (Abstract)

Pavel Paclik, Delft University of Technology, The Netherlands
Jana Novovicova, Academy of Science of Czech Republic, Prague, Czech Republic
Robert P.W. Duin, Delft University of Technology, The Netherlands

pp. 391-394



Comparison of Methods for Hyperspherical Data Averaging and Parameter Estimation (Abstract)

Kai Rothaus, University of Munster, Germany
Xiaoyi Jiang, University of Munster, Germany
Martin Lambers, University of Munster, Germany

pp. 395-399



Data Mining Applied to Acoustic Bird Species Recognition (Abstract)
Erika Vilches, Tecnológico de Monterrey, Campus Estado de México

Ivan A. Escobar, Tecnológico de Monterrey, Campus Estado de México
Edgar E. Vallejo, Tecnológico de Monterrey, Campus Estado de México
Charles E. Taylor, University of California Los Angeles Los Angeles, CA

pp. 400-403



A Hybrid, Recursive Algorithm for Clustering Expressed Sequence Tags in *Chlamydomonas reinhardtii*

(Abstract)

Monica Jain, Carnegie Inst. of Washington, 260 Panama Street, Stanford, CA
Hilary Holz, CSU, East Bay, 25800 Carlos Bee Blvd, Hayward, CA, USA
Jeff Shrager, Carnegie Inst. of Washington, 260 Panama Street, Stanford, CA
Olivier Vallon, CNRS/Université Paris 6, Institut de Biologie Physico-Chimique, Paris, France
Charles Hauser, Duke University, Durham NC
Arthur Grossman, Carnegie Inst. of Washington, 260 Panama Street, Stanford, CA

pp. 404-407



The Twin Towers Cluster in Torah Codes (Abstract)

Eliyahu Rips, Hebrew University, Givat Ram Jerusalem 91904, Israel
Art Levitt, Torah Code Research Group Jerusalem, Israel

pp. 408-411



Component Analysis of Torah Code Phrases (Abstract)

Art Levitt, Torah Code Research Group Jerusalem, Israel

pp. 412-416



Fast Feature Extraction Approach for Multi-Dimension Feature Space Problems

(Abstract)

Alaa Sagheer, Kyushu University, Japan
Naoyuki Tsuruta, Fukuoka University, Japan

Rin-Ichiro Taniguchi, Kyushu
University, Japan
Daisaku Arita, Kyushu University,
Japan
Sakashi Maeda, Fukuoka University,
Japan

pp. 417-420



Local Variance Driven Self-Organization for Unsupervised Clustering

(Abstract)

Matthew Kyan, University of Sydney,
Australia
Ling Guan, Ryerson University,
Canada

pp. 421-424



Wed-O-II-2a: Pattern Classification I

Bootstrap Methods for Reject Rules of Fisher LDA (Abstract)

Jigang Xie, Beijing Jiaotong
University, Beijing 100044, China
Zhengding Qiu, Beijing Jiaotong
University, Beijing 100044, China
Jie Wu, Beijing Jiaotong University,
Beijing 100044, China

pp. 425-428



A Complementary Ordering Method for Class Imbalanced Problem (Abstract)

Hsien-Ting Cheng, Academia Sinica,
Taipei, Taiwan.
Chu-Song Chen, Academia Sinica,
Taipei, Taiwan.

pp. 429-432



A Minimum Sphere Covering Approach to Pattern Classification (Abstract)

Jigang Wang, Brown University,
Providence, RI
Predrag Neskovic, Brown University,
Providence, RI
Leon N Cooper, Brown University,
Providence, RI

pp. 433-436



Wed-O-II-2b: Pattern Matching Methods II

On Authorship Attribution via Markov Chains and Sequence Kernels (Abstract)

Conrad Sanderson, Australian National University, Canberra, ACT 0200, Australia
Simon Guenter, Australian National University, Canberra, ACT 0200, Australia

pp. 437-440



Shape Recognition using Curve Segment Hausdorff Distance (Abstract)

Xiaozhou Yu, Nanyang Technological University, SCE, Singapore
Maylor K.H. Leung, Nanyang Technological University, SCE, Singapore

pp. 441-444



Shape-based Discrimination and Classification of Cortical Surfaces (Abstract)

Peng Yu, MIT, Cambridge, MA
Xiao Han, CMS Inc., St.Louis, MO
Florent Segonne, MIT, AI lab, Cambridge, MA
Arthur K. Liu, Radiology, MGH, Charlestown, MA
Russell A. Poldrack, UCLA, Los Angeles, CA
Polina Golland, MIT, AI lab, Cambridge, MA
Bruce Fischl, MIT, Cambridge, MA

pp. 445-448



Structural Matching Via Optimal Basis Graphs (Abstract)

Fred W. DePiero, CalPoly State University, San Luis Obispo, CA
John K. Carlin, Agilent Technologies, Colorado Springs, CO

pp. 449-452



Selecting vantage objects for similarity indexing (Abstract)

Reinier H. van Leeuken, Utrecht

University, The Netherlands
Remco C. Veltkamp, Utrecht
University, The Netherlands
Rainer Typke, Utrecht University, The
Netherlands

pp. 453-456



ABSTRACT



PDF



BUY ARTICLE

Wed-O-IV-2: Gait, Body Pose and Writer Recognition

Human Motion De-noising via Greedy Kernel Principal Component Analysis Filtering

(Abstract)

Therdsak Tangkuampien, Monash University, Victoria, Australia.
David Suter, Monash University, Victoria, Australia.

pp. 457-460



ABSTRACT



PDF



BUY ARTICLE

Wed-P-II-2: Biometrics

Feature Extraction with Genetic Algorithms Based Nonlinear Principal Component Analysis for Face Recognition

(Abstract)
Nan Liu, Nanyang Technological University, Singapore
Han Wang, Nanyang Technological University, Singapore

pp. 461-464



ABSTRACT



PDF



BUY ARTICLE

Face Recognition by Combining Kernel Associative Memory and Gabor Transforms

(Abstract)
Bai-ling Zhang, Victoria University, Australia
Clement Leung, Victoria University, Australia
Yongsheng Gao, Griffith University, Australia

pp. 465-468



ABSTRACT



PDF



BUY ARTICLE

A Complete and Rapid Feature Extraction Method for Face Recognition

(Abstract)
Yu-jie Zheng, Nanjing University of Science and Technology, China
Jing-yu Yang, Nanjing University of Science and Technology, China
Jian Yang, Hong Kong Polytechnic

University
Xiao-jun Wu, Jiangsu University of
Science and Technology, China
Dong-jun Yu, Nanjing University of
Science and Technology, Nanjing,
China

pp. 469-472



ABSTRACT



PDF



BUY ARTICLE

Abnormal Walking Gait Analysis Using Silhouette- Masked Flow Histograms

(Abstract)

Liang Wang, Monash University,
Clayton, VIC, 3800, Australia

pp. 473-476



ABSTRACT



PDF



BUY ARTICLE

Enhancing Training Set for Face Detection (Abstract)

Ruiping Wang, Chinese Academy of
Sciences, Beijing, 100080, China
Jie Chen, Harbin Institute of
Technology, China
Shiguang Shan, Chinese Academy of
Sciences, Beijing, 100080, China
Wen Gao, Graduate School of the
Chinese Academy of Sciences, Beijing,
100039, China

pp. 477-480



ABSTRACT



PDF



BUY ARTICLE

Complete Two-Dimensional PCA for Face Recognition

(Abstract)

Anbang Xu, Beijing Normal University,
China
Xin Jin, Beijing Normal University,
China
Yugang Jiang, Beijing Normal
University, China
Ping Guo, Beijing Normal University,
China

pp. 481-484



ABSTRACT



PDF



BUY ARTICLE

Transformation Invariance in Hand Shape Recognition

(Abstract)

Thomas Coogan, Dublin City
University, Ireland
Alistair Sutherland, Dublin City
University, Ireland

pp. 485-488



ABSTRACT



PDF



BUY ARTICLE

Simultaneous Inference of View and Body Pose using Torus Manifolds (Abstract)
Chan-Su Lee, Rutgers University
Ahmed Elgammal, Rutgers University

pp. 489-494



A Modified Non-negative Matrix Factorization Algorithm for Face Recognition (Abstract)
Yun Xue, Hong Kong Baptist University
Chong Sze Tong, Hong Kong Baptist University
Wen-Sheng Chen, Shenzhen University, P.R.China
Weipeng Zhang, Hong Kong Baptist University

pp. 495-498



3D+2D Face Localization Using Boosting in Multi-Modal Feature Space (Abstract)
Feng Xue, Tsinghua University, Beijing 100084, P.R.China
Xiaoqing Ding, Tsinghua University, Beijing 100084, P.R.China

pp. 499-502



Palmpoint Identification using Boosting Local Binary Pattern (Abstract)
Xianji Wang, University of Science and Technology of China, Hefei, China
Haifeng Gong, University of Science and Technology of China, Hefei, China
Hao Zhang, University of Science and Technology of China, Hefei, China
Bin Li, University of Science and Technology of China, Hefei, China
Zhenquan Zhuang, University of Science and Technology of China, Hefei, China

pp. 503-506



Sparse Bayesian Regression for Head Pose Estimation (Abstract)
Yong Ma, Omron Corporation, Kyoto, Japan

Yoshinori Konishi, Omron Corporation,
Kyoto, Japan
Koichi Kinoshita, Omron Corporation,
Kyoto, Japan
Shihong Lao, Omron Corporation,
Kyoto, Japan
Masato Kawade, Omron Corporation,
Kyoto, Japan

pp. 507-510



A Novel Eye Location Algorithm based on Radial Symmetry Transform

(Abstract)

Li Bai, University of Nottingham,
Nottingham, UK
Linlin Shen, University of Nottingham,
Nottingham, UK
Yan Wang, University of Nottingham,
Nottingham, UK

pp. 511-514



Regression Nearest Neighbor in Face Recognition (Abstract)

Shu Yang, Peking University, Beijing,
P.R. China
Chao zhang, Peking University,
Beijing, P.R. China

pp. 515-518



A Neural Network Approach for Hand Gesture Recognition in Virtual Reality Driving Training System of SPG

(Abstract)

Deyou Xu, Artillery Academy at
Nanjing, 211132,China

pp. 519-522



Bagging Based Efficient Kernel Fisher Discriminant Analysis for Face Recognition

(Abstract)

Yi Li, Chinese Academy of Sciences,
China
Baochang Zhang, Harbin Institute of
Technology, Harbin, China
Shiguang Shan, Harbin Institute of
Technology, Harbin, China
Xilin Chen, Chinese Academy of
Sciences, China
Wen Gao, Chinese Academy of
Sciences, China

pp. 523-526



ABSTRACT



Face Recognition with Relative Difference Space and SVM (Abstract)

Xiaoguang He, Chinese Academy of Sciences, China
Jie Tian, Chinese Academy of Sciences, China
Yuliang He, Chinese Academy of Sciences, China
Xin Yang, Chinese Academy of Sciences, China

pp. 527-531



ABSTRACT



Compound Stochastic Models For Fingerprint Individuality (Abstract)

Yongfang Zhu, Michigan State University, East Lansing, MI
Sarat C. Dass, Michigan State University, East Lansing, MI
Anil K. Jain, Michigan State University, East Lansing, MI

pp. 532-535



ABSTRACT



Facial Expression Recognition Based on Fusion of Multiple Gabor Features (Abstract)

WeiFeng Liu, University of Science and Technology of China, Hefei, Anhui, 230027, P.R.China
ZengFu Wang, University of Science and Technology of China, Hefei, Anhui, 230027, P.R.China

pp. 536-539



ABSTRACT



Facial Feature Selection Based on SVMs by Regularized Risk Minimization (Abstract)

Weihong Li, Key Lab of Optoelectronic Technology & Systems of Education Ministry of China
Weiguo Gong, Key Lab of Optoelectronic Technology & Systems of Education Ministry of China
Liping Yang, Key Lab of Optoelectronic Technology & Systems of Education Ministry of China
Weimin Chen, Key Lab of Optoelectronic Technology & Systems of Education Ministry of China
Xiaohua Gu, Key Lab of Optoelectronic Technology & Systems of Education Ministry of China

pp. 540-543



ABSTRACT



PDF



BUY ARTICLE

**Occlusion Robust Face
Recognition with Dynamic
Similarity Features (Abstract)**

Qingshan Liu, Chinese Academy of Sciences, P.O. Box 2728, Beijing, P. R. China

Wang Yan, Chinese Academy of Sciences, P.O. Box 2728, Beijing, P. R. China

Hanqing Lu, Chinese Academy of Sciences, P.O. Box 2728, Beijing, P. R. China

Songde Ma, Chinese Academy of Sciences, P.O. Box 2728, Beijing, P. R. China

pp. 544-547



ABSTRACT



PDF



BUY ARTICLE

**Variational Shift Invariant
Probabilistic PCA for Face
Recognition (Abstract)**

Jilin Tu, University of Illinois at Urbana-Champaign

Aleksandar Ivanovic, University of Illinois at Urbana-Champaign

Xun Xu, University of Illinois at Urbana-Champaign

Li Fei-Fei, University of Illinois at Urbana-Champaign

Thomas Huang, University of Illinois at Urbana-Champaign

pp. 548-551



ABSTRACT



PDF



BUY ARTICLE

**The Application of a
Convolution Neural Network
on Face and License Plate
Detection (Abstract)**

Ying-Nong Chen, National Central University, Taiwan

Chin-Chuan Han, National Central University, Taiwan

Cheng-Tzu Wang, Fo-Guang University, Taiwan

Bor-Shenn Jeng, National Central University, Taiwan

Kuo-Chin Fan, National Central University, Taiwan

pp. 552-555



ABSTRACT



PDF



BUY ARTICLE

**Human Activity Classification
Based on Gait Energy Image
and Coevolutionary Genetic
Programming (Abstract)**

Xiaotao Zou, University of California,
Riverside, CA 92521, USA
Bir Bhanu, University of California,
Riverside, CA 92521, USA

pp. 556-559



Early Recognition and Prediction of Gestures

(Abstract)

Akihiro Mori, Kyushu University,
Fukuoka, 812-8581, Japan
Seiichi Uchida, Kyushu University,
Fukuoka, 812-8581, Japan
Ryo Kurazume, Kyushu University,
Fukuoka, 812-8581, Japan
Rin-ichiro Taniguchi, Kyushu
University, Fukuoka, 812-8581, Japan
Tsutomu Hasegawa, Kyushu
University, Fukuoka, 812-8581, Japan
Hiroaki Sakoe, Kyushu University,
Fukuoka, 812-8581, Japan

pp. 560-563



An Efficient Face Recognition System Using a New Optimized Localization Method

(Abstract)

Hamidreza Rashidy Kanan, University
of Technology (Tehran Polytechnic),
Hafez Avenue, Tehran, Iran
Karim Faeez, University of Technology
(Tehran Polytechnic), Hafez Avenue,
Tehran, Iran
Mehdi Ezoji, University of Technology
(Tehran Polytechnic), Hafez Avenue,
Tehran, Iran

pp. 564-567



Wed-O-II-3a: Pattern Classification II

A Ground Truth Correspondence Measure for Benchmarking

(Abstract)
Johan Karlsson, Lund University
Anders Ericsson, Lund University

pp. 568-573



Gaussian Weighted Histogram Intersection for License Plate Classification

(Abstract)
Wenjing Jia, University of Technology,
Sydney
Huafeng Zhang, University of

Technology, Sydney
Xiangjian He, University of
Technology, Sydney
Qiang Wu, University of Technology,
Sydney

pp. 574-577



ECOC-ONE: A Novel Coding and Decoding Strategy

(Abstract)

Sergio Escalera, UAB Campus UAB,
08193 Bellaterra, Spain
Oriol Pujol, UAB Campus UAB, 08193
Bellaterra, Spain

pp. 578-581



Enhancing Edit Distance on Real Sequences Filters using Histogram Distance on Fixed Reference Ordering (Abstract)

Prima Chairunnanda, Nanyang
Technological University Singapore
Vivekanand Gopalkrishnan, Nanyang
Technological University Singapore
Lei Chen, Hong Kong University of
Science and Technology, Hong Kong,
China

pp. 582-585



Wed-O-II-3b: Multimodal Recognition

Performance Prediction for Multimodal Biometrics

(Abstract)

Rong Wang, University of California,
Riverside
Bir Bhanu, University of California,
Riverside

pp. 586-589



A Riemannian Weighted Filter for Edge-sensitive Image Smoothing (Abstract)

Shiguang Shan, Institute of
Computing Technology, CAS, Beijing,
China
Wenchao Zhang, Institute of
Computing Technology, CAS, Beijing,
China
Yu Su, Harbin Institute of
Technology, Harbin, China
Xilin Chen, Harbin Institute of
Technology, Harbin, China

Wen Gao, Harbin Institute of Technology, Harbin, China

pp. 590-593



ABSTRACT



PDF



BUY ARTICLE

Track III: Signal, Speech and Image Processing

Wed-O-III-1: Medical Image Processing

A Riemannian Weighted Filter for Edge-sensitive Image Smoothing (Abstract)

Fan Zhang, University of York, York, YO10 5DD, UK

Edwin R. Hancock, University of York, York, YO10 5DD, UK

pp. 594-598



ABSTRACT



PDF



BUY ARTICLE

Physically Motivated Reconstruction of Fiberscopic Images (Abstract)

Matthias Elter, Fraunhofer Institute for Integrated Circuits, Erlangen, Germany

Stephan Rupp, Fraunhofer Institute for Integrated Circuits, Erlangen, Germany

Christian Winter, Fraunhofer Institute for Integrated Circuits, Erlangen, Germany

pp. 599-602



ABSTRACT



PDF



BUY ARTICLE

Image Denoising with k-nearest Neighbor and Support Vector Regression (Abstract)

Bram van Ginneken, University Medical Center Utrecht, the Netherlands

Adrienne Mendrik, University Medical Center Utrecht, the Netherlands

pp. 603-606



ABSTRACT



PDF



BUY ARTICLE

Subpixel Alignment of MRI Data Under Cartesian and Log-Polar Sampling (Abstract)

Murat Balci, University of Central Florida, Orlando, FL 32816-2362, USA

Mais Alnasser, University of Central Florida, Orlando, FL 32816-2362, USA

Hassan Foroosh, University of Central Florida, Orlando, FL 32816-2362, USA

pp. 607-610



ABSTRACT



A Framework for Automatic Segmentation of Lung Nodules from Low Dose Chest CT Scans (Abstract)

Ayman El-Baz, University of Louisville, Louisville, Kentucky, USA.
Aly Farag, University of Louisville, Louisville, Kentucky, USA.
Georgy Gimel'farb, University of Auckland, New Zealand.
Robert Falk, Jewish Hospital, Louisville, Kentucky, USA.
Mohamed A. El-Ghar, University of Mansoura, Mansoura, Egypt.
Tarek Eldiasty, University of Mansoura, Mansoura, Egypt

pp. 611-614



ABSTRACT



Wed-O-III-2: Super-resolution and Restoration

String-Like Occluding Region Extraction for Background Restoration (Abstract)

Toru Tamaki, Hiroshima University, Japan
Hiroshi Suzuki, Niigata University, Japan
Masanobu Yamamoto, Niigata University, Japan

pp. 615-618



ABSTRACT



A Conditional Random Field Model for Video Super-resolution (Abstract)

Dan Kong, University of California, Santa Cruz
Mei Han, NEC Labs America, Cupertino, CA
Wei Xu, NEC Labs America, Cupertino, CA
Hai Tao, NEC Labs America, Cupertino, CA
Yihong Gong, NEC Labs America, Cupertino, CA

pp. 619-622



ABSTRACT



Extending the Depth of Field in a Compound-Eye Imaging System with Super-Resolution Reconstruction (Abstract)

Wai-San Chan, University of Hong Kong

Edmund Y. Lam, University of Hong Kong
Michael K. Ng, Hong Kong Baptist University

pp. 623-626



A Regression Model in TensorPCA Subspace for Face Image Super-resolution Reconstruction (Abstract)

Junwen Wu, University of California, San Diego, CA
Mohan M. Trivedi, University of California, San Diego, CA

pp. 627-630



Image Renaissance Using Discrete Optimization

(Abstract)
Cedric Allene, ENPC-CERTIS and ESIEE-A2SI, France
Nikos Paragios, ENPC-CERTIS and ESIEE-A2SI, France

pp. 631-634



Wed-P-III-2: Image Processing

A Method of Reducing Speckle Noise of SAR Images Based on Wavelets and Wedgelet HMT Models (Abstract)

Haiyan JIN, Xidian University, China
Licheng JIAO, Xidian University, China
Fang LIU, Xidian University, China

pp. 635-638



A Novel Blind Watermarking Algorithm in Contourlet Domain (Abstract)

Haifeng Li, Jilin University, R. P. of China
Jianting Wen, South China Normal University
Haifeng Gong, Chinese Academy of Sciences, China

pp. 639-642



Remote Sensing Image Fusion

on Gradient Field (Abstract)

Jianting Wen, South China Normal University
Yan Li, South China Normal University
Haifeng Gong, Chinese Academy of Sciences, China

pp. 643-646

**Neighbor Pixel Mixture****(Abstract)**

Masayuki Tanaka, Tokyo Institute of Technology, Japan
Masatoshi Okutomi, Tokyo Institute of Technology, Japan

pp. 647-650

**A Digital Watermarking Algorithm and Implementation Based on Improved SVD (Abstract)**

Xinzhong Zhu, Zhejiang Normal University, Jinhua, P.R.China
Jianmin Zhao, Zhejiang Normal University, Jinhua, P.R.China
Huiying Xu, Zhejiang Normal University, Jinhua, P.R.China

pp. 651-656

**Compressed Image Quality Evaluation using Power Law Models (Abstract)**

Y. CARON, Université de Tours France
N. VINCENT, CRIP5- SIP Université Rene Descartes Paris France

pp. 657-660

**Determining Optimal Filters for Binarization of Degraded Characters in Color Using Genetic Algorithms (Abstract)**

Hanako Kohmura, Hosei University, Japan
Toru Wakahara, Hosei University, Japan

pp. 661-664

**Automatic Detection of Song Changes in Music Mixes Using Stochastic Models (Abstract)**

Thomas Plotz, Bielefeld University, 33
594, Germany
Gernot A. Fink, Bielefeld University,
33 594, Germany
Peter Husemann, Bielefeld University,
33 594, Germany
Sven Kanies, Bielefeld University, 33
594, Germany
Kai Lienemann, Bielefeld University,
33 594, Germany
Tobias Marschall, Bielefeld University,
33 594, Germany
Marcel Martin, Bielefeld University, 33
594, Germany
Lars Schillingmann, Bielefeld
University, 33 594, Germany
Matthias Steinrucken, Bielefeld
University, 33 594, Germany
Henner Sudek, Bielefeld University,
33 594, Germany

pp. 665-668



ABSTRACT



PDF



BUY ARTICLE

A Robust Region-Based Multiscale Image Fusion Scheme for Mis-Registration Problem of Thermal and Visible Images (Abstract)

O. Charoentam, Chulalongkorn University, Bangkok, Thailand
V. Patanavijit, Chulalongkorn University, Bangkok, Thailand
S. Jitapunkul, Chulalongkorn University, Bangkok, Thailand

pp. 669-672



ABSTRACT



PDF



BUY ARTICLE

A robust block-based image watermarking scheme using fast Hadamard transform and singular value decomposition (Abstract)

Emad E. Abdallah, Concordia University, Montreal, QC, H3G 1T7, Canada
A. Ben Hamza, Concordia University, Montreal, QC, H3G 1T7, Canada
Prabir Bhattacharya, Concordia University, Montreal, QC, H3G 1T7, Canada

pp. 673-676



ABSTRACT



PDF



BUY ARTICLE

Accelerating the Computation of 3D Gradient Vector Flow Fields (Abstract)

Erik Vidholm, Uppsala University, Sweden
Per Sundqvist, Uppsala University, Sweden
Ingela Nystrom, Uppsala University, Sweden

pp. 677-680



ABSTRACT



PDF



BUY ARTICLE

Optimal Global Mosaic Generation from Retinal Images (Abstract)

Tae Eun Choe, IRIS, University of Southern California
Isaac Cohen, IRIS, University of Southern California
Munwai Lee, IRIS, University of Southern California
Gerard Medioni, IRIS, University of Southern California

pp. 681-684



ABSTRACT



PDF



BUY ARTICLE

Simple and Efficient Colorization in YCbCr Color Space (Abstract)

Hideki Noda, Kyushu Institute of Technology, Japan
Michiharu Niimi, Kyushu Institute of Technology, Japan
Jin Korekuni, Kyushu Institute of Technology, Japan

pp. 685-688



ABSTRACT



PDF



BUY ARTICLE

Planar Structure Based Registration of Multiple Range Images (Abstract)

Daiju Watanabe, Keio University, Japan
Hideo Saito, Keio University, Japan

pp. 689-692



ABSTRACT



PDF



BUY ARTICLE

3D Object Digitization: Topology Preserving Reconstruction (Abstract)

Peer Stelldinger, University of Hamburg, Germany
Longin Jan Latecki, Temple University Philadelphia PA

pp. 693-696



ABSTRACT



PDF



BUY ARTICLE

Multi-modality Image Registration Using Mutual Information Based on Gradient Vector Flow (Abstract)

Yujun Guo, Kent State University, OH,

USA
Cheng-Chang Lu, Kent State
University, OH, USA

pp. 697-700



Vector Quantization Using Reflections of Triangular Subcodevectors (Abstract)

Vishnu Makkapati, Honeywell
Technology Solutions Lab, Bangalore
- 560 076, India
Pravas Mahapatra, Indian Institute of
Science Bangalore - 560 012, India

pp. 701-704



Colony Delineation on Image Classification (Abstract)

Weixing Wang, Chongqing University
of Posts & Telecommunications Post
code: 610054, Chongqing, China

pp. 705-708



Removing Temporal Stationary Blur in Route Panoramas (Abstract)

Jiang Yu Zheng, Indiana University
Purdue University Indianapolis
Min Shi, Indiana University Purdue
University Indianapolis

pp. 709-713



Fingerprint Image Enhancement Based on Skin Profile Approximation (Abstract)

Zhixin Shi, State University of New
York at Buffalo, Amherst, USA
Venu Govindaraju, State University of
New York at Buffalo, Amherst, USA

pp. 714-717



Combining Adaptive PDE and Wavelet Shrinkage in Image Denoising with Edge Enhancing Property (Abstract)

Jiying Wu, Jiaotong University,
Beijing, 100044, China
Qiuqi Ruan, Jiaotong University,
Beijing, 100044, China

pp. 718-721



ABSTRACT



PDF



BUY ARTICLE

Scanner Artifact Removal in Simultaneous EEG-fMRI for Epileptic Seizure Prediction (Abstract)

Min Jing, Cardiff University, UK
Saeid Sanei, Cardiff University, UK

pp. 722-725



ABSTRACT



PDF



BUY ARTICLE

Adaptive Persistence Utilizing Motion Compensation for Ultrasound Images (Abstract)

Gang Wang, Sichuan University, China
Dong C. Liu, Sichuan University, China

pp. 726-729



ABSTRACT



PDF



BUY ARTICLE

Accurate 3-D Motion Tracking with an Application to Super-Resolution (Abstract)

Ying Kin Yu, Chinese University of Hong Kong, Hong Kong.
Siu Hang Or, Chinese University of Hong Kong, Hong Kong.
Kin Hong Wong, Chinese University of Hong Kong, Hong Kong.
Michael Ming Yuen Chang, Chinese University of Hong Kong, Hong Kong.

pp. 730-733



ABSTRACT



PDF



BUY ARTICLE

YUV Correction for Multi-View Video Compression (Abstract)

Yushan Chen, Huaqiao University, Quanzhou, China
Canhui Cai, Huaqiao University, Quanzhou, China
Jilin Liu, Zhejiang University, Hangzhou, China

pp. 734-737



ABSTRACT



PDF



BUY ARTICLE

Lie Methods in Color Signal Processing: Illumination Effects (Abstract)

Reiner Lenz, Linkoping University, Sweden
Martin Solli, Linkoping University, Sweden

pp. 738-741



ABSTRACT



PDF



BUY ARTICLE

**Adaptive Binarization of Historical Document Images
(Abstract)**

Ergina Kavallieratou, University of the Aegean, 83200 Samos, Greece
Stamatatos Stathis, University of the Aegean, 83200 Samos, Greece

pp. 742-745



ABSTRACT



PDF



BUY ARTICLE

QIM watermarking combined to JPEG2000 part I and II.**(Abstract)**

Achraf Makhloifi, Syscom, ENIT,
Tunis,Tunisia
Azza Ouled Zaid, Syscom, ENIT,
Tunis,Tunisia
Ridha Boualleg, Syscom, ENIT,
Tunis,Tunisia
Ammar Boualleg, Syscom, ENIT,
Tunis,Tunisia

pp. 746-749



ABSTRACT



PDF



BUY ARTICLE

Human and Object Detection in Smoke-filled Space using Millimeter-wave radar based Measurement System**(Abstract)**

Masaki Sakai, Shibaura Institute of Technology, Japan
Yoshimitsu Aoki, Shibaura Institute of Technology, Japan

p. 750



ABSTRACT



PDF



BUY ARTICLE

Wavelet denoising of multicomponent images, using a Gaussian Scale Mixture model**(Abstract)**

Paul Scheunders, University of Antwerp, Universiteitsplein, Belgium
Steve De Backer, University of Antwerp, Universiteitsplein, Belgium

pp. 754-757



ABSTRACT



PDF



BUY ARTICLE

Multiple Regions of Interest Image Coding using Compensation Scheme and Alternating Shift**(Abstract)**

Li-bao Zhang, Beijing Normal University, China
Xian-chuan Yu, Beijing Normal University, China

pp. 758-761



Probabilistic Automatic Red Eye Detection and Correction (Abstract)

Jutta Willamowski, Xerox Research Centre Europe, 6, ch. de Maupertuis, 38240 Meylan, France
Gabriela Csurka, Xerox Research Centre Europe, 6, ch. de Maupertuis, 38240 Meylan, France

pp. 762-765



Iterative Image Restoration using a Non-Local Regularization Function and a Local Regularization Operator (Abstract)

Feng XUE, Universite de Bretagne SUD 56017 Vannes, France
Quan-sheng LIU, Universite de Bretagne SUD 56017 Vannes, France
Wei-hong FAN, National University of Defense Technology, ChangSha, China

pp. 766-769



Super-resolution in the presence of space-variant blur (Abstract)

K.V. Suresh, Image Processing and Computer Vision Laboratory, IIT Madras Chennai-36, India
A.N. Rajagopalan, Image Processing and Computer Vision Laboratory, IIT Madras Chennai-36, India

pp. 770-773



Correction of intensity of a color image using a range intensity image (Abstract)

Megumi Shinozaki, Chuo University, Japan
Kazunori Umeda, Chuo University, Japan
Guy Godin, National Research Council, Canada
Marc Rioux, National Research Council, Canada

pp. 774-777

 ABSTRACT  PDF  BUY ARTICLE**Adaptive variational sinogram interpolation of sparsely sampled CT data (Abstract)**

H. Kostler, Friedrich-Alexander University of Erlangen-Nuremberg
91058 Erlangen, Germany
M. Prummer, Friedrich-Alexander University of Erlangen-Nuremberg
91058 Erlangen, Germany
U. Rude, Friedrich-Alexander University of Erlangen-Nuremberg
91058 Erlangen, Germany
J. Hornegger, Friedrich-Alexander University of Erlangen-Nuremberg
91058 Erlangen, Germany

pp. 778-781

 ABSTRACT  PDF  BUY ARTICLE**A New Efficient SVM-based Image Registration Method (Abstract)**

DaiQiang Peng, Huazhong University of Science and Technology, Wuhan
430074 , China
DingXue Wu, Huanggang Normal College , China
JinWen Tian, Huazhong University of Science and Technology, Wuhan
430074 , China

pp. 782-785

 ABSTRACT  PDF  BUY ARTICLE**Adaptive Region Growing Impulse Noise Estimator for Color Images (Abstract)**

Mieng Quoc Phu, Monash University, Vic, Australia.
Peter Eric Tischer, Monash University, Vic, Australia.
Hon Ren Wu, RMIT University, Vic, Australia.

pp. 786-789

 ABSTRACT  PDF  BUY ARTICLE**Stochastic Framework for Symmetric Affine Matching between Point Sets (Abstract)**

Sai Kit Yeung, Hong Kong University of Science and Technology, Kowloon, Hong Kong
Pengcheng Shi, College of Biomedical Engineering, Southern Medical University, Guangzhou, China

pp. 790-793

 ABSTRACT  PDF  BUY ARTICLE

Winner Update on Walsh-Hadamard Domain for Fast Motion Estimation (Abstract)
Shao-Wei Liu, National Tsing Hua University, Hsinchu, Taiwan
Shou-Der Wei, National Tsing Hua University, Hsinchu, Taiwan
Shang-Hong Lai, National Tsing Hua University, Hsinchu, Taiwan

pp. 794-797



Bijective Image Registration using Thin-Plate Splines. (Abstract)
Anders P Eriksson, Lund University, Sweden
Kalle Astrom, Lund University, Sweden

pp. 798-801



A Secret Image Sharing Method Using Integer-to-Integer Wavelet Transform (Abstract)
Chin-Pan Huang, Ming Chuan Univ., Taoyuan, Taiwan, ROC
Ching-Chung Li, Univ. of Pittsburgh, Pittsburgh, PA, USA

pp. 802-805



Lossless Compression of Textual Images: A Study on Indic Script Documents (Abstract)
Utpal Garain, Indian Statistical Institute, 203, B.T. Road, Kolkata 700108, India
M. P. Chakraborty, Indian Statistical Institute, 203, B.T. Road, Kolkata 700108, India
Bhabatosh Chanda, Indian Statistical Institute, 203, B.T. Road, Kolkata 700108, India

pp. 806-809



Object Removal By Cross Isophotes Exemplar-based Inpainting (Abstract)
Jiying Wu, Jiaotong University, Beijing, 100044, China
Qiuqi Ruan, Jiaotong University, Beijing, 100044, China

pp. 810-813



ABSTRACT



PDF



BUY ARTICLE

Knowledge Based Image Enhancement Using Neural Networks (Abstract)

Claudia Nieuwenhuis, Technical University of Ilmenau, 98693 Ilmenau, Germany
Michelle Yan, Siemens Corporate Research, Princeton, NJ

pp. 814-817



ABSTRACT



PDF



BUY ARTICLE

Simultaneous Image Denoising and Compression by Multiscale 2D Tensor Voting (Abstract)

Yu-Wing Tai, Hong Kong University of Science and Technology
Wai-Shun Tong, Hong Kong University of Science and Technology
Chi-Keung Tang, Hong Kong University of Science and Technology

pp. 818-821



ABSTRACT



PDF



BUY ARTICLE

Image Analysis of Renal DCE MRI for the Detection of Acute Renal Rejection

(Abstract)

Ayman El-Baz, University of Louisville, Louisville, Kentucky, USA.
Aly Farag, University of Louisville, Louisville, Kentucky, USA.
Rachid Fahmi, University of Louisville, Louisville, Kentucky, USA.
Seniha Yuksela, University of Louisville, Louisville, Kentucky, USA.
Mohamed A. El-Ghar, University of Mansoura, Mansoura, Egypt.
Tarek Eldiasty, University of Mansoura, Mansoura, Egypt.

pp. 822-825



ABSTRACT



PDF



BUY ARTICLE

Human Head Tracking in Three Dimensional Voxel Space (Abstract)

Haruki Kawanaka, Aichi Prefectural University,Aichi, 480-1198, Japan
Hironobu Fujiyoshi, Chubu University,Aichi, 487-8501, Japan
Yuji Iwahori, Chubu University,Aichi, 487-8501, Japan

pp. 826-829



Wed-P-III-3: Signal Processing

The Classification Gradient

(Abstract)

Vassili A. Kovalev, University of Surrey, UK
Maria Petrou, Imperial College, UK

pp. 830-833



Gender Recognition in Non Controlled Environments

(Abstract)

Agata Lapedriza, Universitat Autonoma de Barcelona, Bellaterra, Spain
Manuel J. Marin-Jimenez, University of Granada, Spain
Jordi Vitria, Universitat Autonoma de Barcelona, Spain

pp. 834-837



Laplacian Based Non-Linear Diffusion Filtering (Abstract)

Haruhiko Nishiguchi, Chiba University, Japan
Atsushi Imai, MTD IMIT, Chiba University, Japan
Tomoya Sakai, MTD IMIT, Chiba University, Japan

pp. 838-841



Microarray Missing Data Imputation based on a Set Theoretic Framework and Biological Constraints

(Abstract)

Xiangchao Gan, City University of Hong Kong
Alan Wee-Chung Liew, Chinese University of Hong Kong, Shatin, Hong Kong
Hong Yan, University of Sydney, NSW 2006, Australia

pp. 842-845



A Method For IR Point Target Detection Based on Spatial-temporal Bilateral Filter

(Abstract)

Jihong Pei, Shenzhen University,
Shenzhen, China
Zongqing Lu, Xidian University, Xi'an
,710071, China
Weixin Xie, Shenzhen University,
Shenzhen, China

pp. 846-849



Efficient Non-Maximum Suppression (Abstract)

Alexander Neubeck, ETH Zurich,
Switzerland Computer Vision Lab
Luc Van Gool, ETH Zurich,
Switzerland Computer Vision Lab

pp. 850-855



Multi-orientation analysis by decomposing the structure tensor and clustering

(Abstract)
L.J. van Vliet, Delft University of Technology, The Netherlands
F.G.A. Faas, Delft University of Technology, The Netherlands

pp. 856-860



Digital Watermarking in Contourlet Domain (Abstract)

M. Jayalakshmi, SPANN Lab, Electrical Engineering Department, Indian Institute of Technology, Bombay, India
S. N. Merchant, SPANN Lab, Electrical Engineering Department, Indian Institute of Technology, Bombay, India
Uday B. Desai, SPANN Lab, Electrical Engineering Department, Indian Institute of Technology, Bombay, India

pp. 861-864



OK-Quantization Theory - A Mathematical Theory of Quantization - (Abstract)

Hiroyasu Koshimizu, Chukyo University, Japan
Yuji Tanaka, Chukyo University, Japan
Takayuki Fujiwara, Chukyo University, Japan

pp. 865-868



A Theoretical and Experimental Consideration on Interference in Resolutions between Sampling Theorem and OK-Quantization Theory (Abstract)
Yuji Tanaka, Chukyo University, Japan
Takayuki Fujiwara, Chukyo University, Japan
Hiroyasu Koshimizu, Chukyo University, Japan
Taizo Iijima, Chukyo University, Japan

pp. 869-872



An Efficient Algorithm for Point Matching Using Hilbert Scanning Distance (Abstract)
Li Tian, Waseda University, Japan
Sei-ichiro Kamata, Waseda University, Japan

pp. 873-876



Multimodal Registration using the Discrete Wavelet Frame Transform (Abstract)
Shutao Li, Hunan University Changsha, China
Jinglin Peng, Hunan University Changsha, China
James T. Kwok, Hong Kong University of Science and Technology Clear Water Bay, Hong Kong
Jing Zhang, Hunan University Changsha, China

pp. 877-880



Automatic Lipreading with Limited Training Data (Abstract)
S.L. Wang, Shanghai Jiaotong University, Shanghai, CHINA
W.H. Lau, City University of Hong Kong, Kowloon, HONG KONG
S.H. Leung, Chinese University of Hong Kong, Shatin, HONG KONG

pp. 881-884



A new adaptive diffusion equation for image noise removal and feature

preservation (Abstract)
Shoushui Chen, Shanghai Jiao Tong
University
Xin Yang, Shanghai Jiao Tong
University

pp. 885-888



Uncertainties-driven Surface Morphing: The case of Photo-realistic Transitions between Facial Expressions (Abstract)

Maxime TARON, CERTIS, Ecole des
Ponts et Chaussees, 77455 Marne la
Vallee, France
Charlotte Ghys, MAS, Ecole Centrale
Paris 92295 Chatenay Malabry, France
Nikos PARAGIOS, MAS, Ecole Centrale
Paris 92295 Chatenay Malabry, France

pp. 889-892



**Medical Image Compression:
Study of the Influence of
Noise on the JPEG 2000
Compression Performance**

(Abstract)
Ahmed Nabil Belbachir, ARC,
Seibersdorf Research GmbH, Vienna,
Austria
Peter Michael Goebel, Karl-
Landsteiner Institute for
Biotelematics, Vienna, Austria

pp. 893-896



**Superimposing 3D Virtual
Objects using Markerless
Tracking** (Abstract)

Sang-Cheol Park, Korea University,
Anam-dong, Seongbuk-ku, Seoul 136-
713, Korea
Sang-Woong Lee, Korea University,
Anam-dong, Seongbuk-ku, Seoul 136-
713, Korea
Seong-Whan Lee, Korea University,
Anam-dong, Seongbuk-ku, Seoul 136-
713, Korea

pp. 897-900



**A Method for Crack Detection
on a Concrete Structure**

(Abstract)
Yusuke Fujita, Yamaguchi University,
Japan
Yoshihiro Mitani, Ube National College
of Technology, Tokiwadai, Ube, Japan

Yoshihiko Hamamoto, Yamaguchi
University, Ube, Japan

pp. 901-904



ABSTRACT



PDF



BUY ARTICLE

Joint Optimization of Image Registration and Comparametric Exposure Compensation Based on the Lucas-Kanade Algorithm

(Abstract)

Dong Sik Kim, Hankuk University of Foreign Studies, Korea
Su Yeon Lee, Hankuk University of Foreign Studies, Korea
Kiryung Lee, Mobile Multimedia Lab.LG Electronics Institute of Technology, Korea

pp. 905-908



ABSTRACT



PDF



BUY ARTICLE

A New Approach for Fractal Image Compression on a Virtual Hexagonal Structure

(Abstract)

Huaqing Wang, University of Technology, Sydney, Australia
Xiangjian He, University of Technology, Sydney, Australia
Qiang Wu, University of Technology, Sydney, Australia
Tom Hintz, University of Technology, Sydney, Australia

pp. 909-912



ABSTRACT



PDF



BUY ARTICLE

Age simulation for face recognition (Abstract)

Junyan Wang, Tsinghua University, Beijing, China
Yan Shang, Tsinghua University, Beijing, China
Guangda Su, Tsinghua University, Beijing, China
Xinggang Lin, Tsinghua University, Beijing, China

pp. 913-916



ABSTRACT



PDF



BUY ARTICLE

Probabilistic Modeling of Blood Vessels for Segmenting MRA Images (Abstract)

Ayman El-Baz, University of Louisville, Louisville, Kentucky, USA.
Aly Farag, University of Louisville, Louisville, Kentucky, USA.
Georgy Gimel'farb, University of Auckland, New Zealand.

Mohamed A. El-Ghar, University of
Mansoura, Mansoura, Egypt.
Tarek Eldiasty, University of
Mansoura, Mansoura, Egypt.

pp. 917-920



Multiplierless Fast DCT Algorithms with Minimal Approximation Errors

(Abstract)

Raymond K.W. Chan, Chinese University of Hong Kong, Shatin, N.T., Hong Kong
Moon-Chuen Lee, Chinese University of Hong Kong, Shatin, N.T., Hong Kong

pp. 921-925



Detecting irregularities in regular patterns (Abstract)

J. Virtainen, Lappeenranta University of Technology, Finland
A. Sadovnikov, Lappeenranta University of Technology, Finland
L. Lensu, Lappeenranta University of Technology, Finland
J.-K. Kamarainen, Lappeenranta University of Technology, Finland
H. Kalviainen, Lappeenranta University of Technology, Finland

pp. 926-929



Toward Blind Robust Watermarking of Vector Maps

(Abstract)

Yu-Chi Pu, Far East College, Tainan, Taiwan
Wei-Chang Du, I-Shou University, Kaohsiung, Taiwan
I-Chang Jou, National Kaohsiung First University of Science and Technology, Kaohsiung, Taiwan

pp. 930-933



Region of Interest Watermarking Based on Fractal Dimension (Abstract)

Rongrong Ni, Beijing Jiaotong University, Beijing 100044, China
Qiuqi Ruan, Beijing Jiaotong University, Beijing 100044, China

pp. 934-937

**Normalization of Functional Magnetic Resonance Images by Classified Cerebrospinal Fluid Cluster (Abstract)**

Zhenghui Hu, Hong Kong University of Science and Technology, Kowloon, Hong Kong
Pengcheng Shi, Southern Medical University, Guangzhou, China

pp. 938-941

**Searching for Similarities in Nearly Periodic Signals With Application to ECG Data Compression (Abstract)**

J. Henriques, University of Coimbra, Coimbra, Portugal
M. Brito, University of Coimbra, Coimbra, Portugal
P. Gil, University of Coimbra, Coimbra, Portugal
P. Carvalho, University of Coimbra, Coimbra, Portugal
M. Antunes, Centre of Cardio-Thoracic Surgery of the University Hospital of Coimbra, Coimbra, Portugal

pp. 942-945

**Automatic Hip Bone Segmentation Using Non-Rigid Registration (Abstract)**

Johanna Pettersson, Linkoping University, Sweden
Hans Knutsson, Linkoping University, Sweden
Magnus Borga, Linkoping University, Sweden

pp. 946-949

**Triangular Mesh Generation of Octrees of Non-Convex 3D Objects (Abstract)**

Dongjoe Shin, University of Warwick, Coventry, CV4 7AL, UK
Tardi Tjahjadi, University of Warwick, Coventry, CV4 7AL, UK

pp. 950-953

**Motion Dependent Spatiotemporal Smoothing for**

Noise Reduction in Very Dim Light Image Sequences

(Abstract)

Henrik Malm, Lund University,
Helgonavägen 3, S-223 62 Lund,
Sweden
Eric Warrant, Lund University,
Helgonavägen 3, S-223 62 Lund,
Sweden

pp. 954-959



ABSTRACT



PDF



BUY ARTICLE

Multiple Camera Calibration with Bundled Optimization using Silhouette Geometry Constraints

(Abstract)

Hirotake Yamazoe, ATR Intelligent Robotics and Communication Laboratories, Kyoto 619-0288, Japan
Akira Utsumi, ATR Intelligent Robotics and Communication Laboratories, Kyoto 619-0288, Japan
Shinji Abe, ATR Intelligent Robotics and Communication Laboratories, Kyoto 619-0288, Japan

pp. 960-963



ABSTRACT



PDF



BUY ARTICLE

Hippocampal Surface Analysis Using Spherical Harmonic Function Applied to Surface Conformal Mapping

(Abstract)

Boris Gutman, University of California, Los Angeles, CA USA
Yalin Wang, University of California, Los Angeles, CA USA
Lok Ming Lui, University of California, Los Angeles, CA USA
Tony E Chan, University of California, Los Angeles, CA USA
Paul M. Thompson, UCLA Medical School, Los Angeles, CA USA

pp. 964-967



ABSTRACT



PDF



BUY ARTICLE

Track IV: Systems, Robotics and Applications with Associated Theme: Biometrics

Wed-O-IV-1: Biomedical Imaging II

Automatic Segmentation of Muscles of Mastication from Magnetic Resonance Images Using Prior Knowledge

(Abstract)

H.P. Ng, NUS Graduate School for Integrative Sciences and Engineering, Singapore
S.H. Ong, National University of

Singapore
K.W.C. Foong, National University of
Singapore
P.S. Goh, National University of
Singapore
W.L. Nowinski, Biomedical Imaging
Lab, Agency for Science Technology
and Research, Singapore

pp. 968-971



Classification of Segmented Regions in Brightfield Microscope Images (Abstract)

Marko Tscherepanow, Bielefeld
University, Germany
Frank Zollner, Bielefeld University,
Germany
Franz Kummert, Bielefeld University,
Germany

pp. 972-975



Segmentation of Medical Images with Regional Inhomogeneities (Abstract)

D.K. Iakovidis, University of Athens,
Greece
M.A. Savelonas, University of Athens,
Greece
S.A. Karkanis, Lamia Institute of
Technology, Greece
D.E. Maroulis, University of Athens,
Greece

pp. 976-979



Adaptive Control of Video Display for Diagnostic Assistance by Analysis of Capsule Endoscopic Images (Abstract)

Vu Hai, ISIR, Osaka University, 8-1
Mihogaoka, Osaka, 567-0047, Japan
Tomio Echigo, Osaka Electro-
Communication University, 18-8
Hatsu-cho, Osaka, 572-8530, Japan
Ryusuke Sagawa, ISIR, Osaka
University, 8-1 Mihogaoka, Osaka,
567-0047, Japan
Keiko Yagi, Kobe Pharmaceutical
University, Japan
Masatsugu Shiba, Osaka City
University Graduate Medical School,
Japan
Kazuhide Higuchi, Osaka City
University Graduate Medical School,
Japan
Tetsuo Arakawa, Osaka City
University Graduate Medical School,
Japan
Yasushi Yagi, ISIR, Osaka University,
8-1 Mihogaoka, Osaka, 567-0047,

[Japan](#)[pp. 980-983](#)[ABSTRACT](#)[PDF](#)[BUY ARTICLE](#)**Bayesian MS Lesion
Classification Modeling
Regional and Local Spatial
Information (Abstract)**

Rola Harmouche, Centre for Intelligent Machines
Louis Collins, Montreal Neurological Institute
Douglas Arnold, Montreal Neurological Institute
Simon Francis, Montreal Neurological Institute
Tal Arbel, Centre for Intelligent Machines

[pp. 984-987](#)[ABSTRACT](#)[PDF](#)[BUY ARTICLE](#)**Extraction of trabecular structures of mandible excluding tooth roots on dental panoramic radiographs using mathematical morphology (Abstract)**

Akira Asano, Hiroshima University, Japan
Takahiro Tambe, Hiroshima University, Japan
Akira Taguchi, Hiroshima University, Japan
Akira Taguchi, Hiroshima University, Japan
Chie Muraki Asano, Hiroshima University, Japan
Takashi Nakamoto, Hiroshima University, Japan
Keiji Tanimoto, Hiroshima University, Japan
Takao Hinamoto, Hiroshima University, Japan
Mitsushi Muneyasu, Kansai University, Japan

[pp. 988-991](#)[ABSTRACT](#)[PDF](#)[BUY ARTICLE](#)**Wed-O-IV-2: Gait, Body Pose and Writer Recognition****Off-lineWriter Identification Using Gaussian Mixture Models (Abstract)**

Andreas Schlapbach, University of Bern, Switzerland
Horst Bunke, University of Bern, Switzerland

[pp. 992-995](#)



Human Identification by Using the Motion and Static Characteristic of Gait

(Abstract)

Toby H.W. Lam, Hong Kong Polytechnic University
Raymond S.T. Lee, Hong Kong Polytechnic University

pp. 996-999



Efficient Night Gait Recognition Based on Template Matching (Abstract)

Daoliang Tan, Chinese Academy of Sciences, Beijing, China
Kaiqi Huang, Chinese Academy of Sciences, Beijing, China
Shiqi Yu, Chinese Academy of Sciences, Beijing, China
Tieniu Tan, Chinese Academy of Sciences, Beijing, China

pp. 1000-1003



Reconstructing 3D Human Body Pose from Stereo Image Sequences Using Hierarchical Human Body Model Learning

(Abstract)

Hee-Deok Yang, Korea University
Seong-Whan Lee, Korea University

pp. 1004-1007



Wed-O-II-3b: Multimodal Recognition

Face Recognition Using Angular LDA and SVM Ensembles (Abstract)

R.S. Smith, University of Surrey, Guildford, Surrey, GU2 7XH, UK
J. Kittler, University of Surrey, Guildford, Surrey, GU2 7XH, UK
M. Hamouz, University of Surrey, Guildford, Surrey, GU2 7XH, UK
J. Illingworth, University of Surrey, Guildford, Surrey, GU2 7XH, UK

pp. 1008-1012



A Multimodal and Multistage

Face Recognition Method for Simulated Portrait (Abstract)
Guangda Su, Tsinghua University
Beijing 100084, P.R.China
Yan Shang, Tsinghua University
Beijing 100084, P.R.China
Cheng Du, Tsinghua University Beijing
100084, P.R.China
Junyan Wang, Tsinghua University
Beijing 100084, P.R.China

pp. 1013-1017



Comparative Analysis of Decision-level Fusion Algorithms for 3D Face Recognition (Abstract)
Berk Gokberk, Bocgazici University, Turkey
Lale Akarun, Bocgazici University, Turkey

pp. 1018-1021



Wed-O-IV-3: Automation and Robotics

Hand-Eye Calibration Based on Screw Motions (Abstract)
Zijian Zhao, Shanghai Jiao Tong University, Shanghai, China
Yuncai Liu, Shanghai Jiao Tong University, Shanghai, China

pp. 1022-1026



Monocular Vision Based SLAM for Mobile Robots (Abstract)
E. Mouragnon, Universite Blaise Pascal/CNRS, 63177 Aubiere Cedex, France
M. Lhuillier, Universite Blaise Pascal/CNRS, 63177 Aubiere Cedex, France
M. Dhome, Universite Blaise Pascal/CNRS, 63177 Aubiere Cedex, France
F. Dekeyser, Universite Blaise Pascal/CNRS, 63177 Aubiere Cedex, France
P. Sayd, Universite Blaise Pascal/CNRS, 63177 Aubiere Cedex, France

pp. 1027-1031



Online Aggregate Particle Size Measurement on A

Conveyor Belt (Abstract)

Weixing Wang, Chongqing University
of Posts and Telecommunications Post
code: 610054, Chongqing, China

pp. 1032-1035



ABSTRACT



PDF



BUY ARTICLE

A Texture Based Matching**Approach for Automated****Assembly of Puzzles (Abstract)**

Mahmut Samil Sagiroglu, Sabanci
University
Aytul Ercil, Sabanci University

pp. 1036-1041



ABSTRACT



PDF



BUY ARTICLE

A Fast Detector of Line**Images Acquired by an****Uncalibrated Paracatadioptric Camera (Abstract)**

Bertrand VANDEPORTEALE, IRIT and
LEN7, ENSEEIHT, 2 rue Camichel,
31071 TOULOUSE, FRANCE
Michel CATTOEN, IRIT and LEN7,
ENSEEIHT, 2 rue Camichel, 31071
TOULOUSE, FRANCE
Philippe MARTHON, IRIT and LEN7,
ENSEEIHT, 2 rue Camichel, 31071
TOULOUSE, FRANCE

pp. 1042-1045



ABSTRACT



PDF



BUY ARTICLE

Wed-P-IV-3: Sensors, Systems &**Algorithms, Mobile Robots,****Surveillance and Biometrics****Real-Time Spherical Stereo****(Abstract)**

Shigang Li, Iwate University Japan

pp. 1046-1049



ABSTRACT



PDF



BUY ARTICLE

A Pattern Recognition Scheme**for Distributed Denial of****Service (DDoS) Attacks in****Wireless Sensor Networks****(Abstract)**

Z. A. Baig, Monash University,

Australia

M. Baeer, Monash University,

Australia

A. I. Khan, Monash University,

Australia

pp. 1050-1054



ABSTRACT



PDF



BUY ARTICLE

A New Set of Topology Preserving Removal Operations in the 3D Space
(Abstract)
Carlo Arcelli, Instituto di Cibernetica,
CNR Via Campi Flegrei 34, 80078
Pozzuoli, Naples, Italy
Gabriella Sanniti di Baja, Instituto di
Cibernetica, CNR Via Campi Flegrei
34, 80078 Pozzuoli, Naples, Italy
Luca Serino, Instituto di Cibernetica,
CNR Via Campi Flegrei 34, 80078
Pozzuoli, Naples, Italy

pp. 1055-1058



Motion Features from Lip Movement for Person Authentication (Abstract)
Maycel Isaac Faraj, Halmstad University
Josef Bigun, Halmstad University

pp. 1059-1062



Real-time Localization in Outdoor Environments using Stereo Vision and Inexpensive GPS (Abstract)
Motilal Agrawal, SRI International 333
Ravenswood Ave Menlo Park, CA
Kurt Konolige, SRI International 333
Ravenswood Ave Menlo Park, CA

pp. 1063-1068



A Split & Merge Approach to Metric-Topological Map-Building (Abstract)
Jochen Schmidt, Auckland University of Technology, Auckland, New Zealand
Chee K. Wong, Auckland University of Technology, Auckland, New Zealand
Wai K. Yeap, Auckland University of Technology, Auckland, New Zealand

pp. 1069-1072



Kalman Filtering for Robust Identification of Face Images with Varying Expressions and Lighting Conditions (Abstract)
Horst Eidenberger, Vienna University of Technology, Vienna, Austria

pp. 1073-1076



ABSTRACT



PDF



BUY ARTICLE

Using Extended EM to Segment Planar Structures in 3D (Abstract)

Rolf Lakaemper, Temple University,
Philadelphia,PA,USA
Longin Jan Latecki, Temple University,
Philadelphia,PA,USA

pp. 1077-1082



ABSTRACT



PDF



BUY ARTICLE

Physics-based Fusion of Multispectral Data for Improved Face Recognition

(Abstract)

Hong Chang, University of Tennessee,
Knoxville
Andreas Koschan, University of Tennessee,
Knoxville
Besma Abidi, University of Tennessee,
Knoxville
Mongi Abidi, University of Tennessee,
Knoxville

pp. 1083-1086



ABSTRACT



PDF



BUY ARTICLE

Learning a Sparse Representation from Multiple Still Images for On-Line Face Recognition in an Unconstrained Environment

(Abstract)

Johan W.H. Tangelder, Centre for Mathematics and Computer Science (CWI), Amsterdam, The Netherlands
Ben A.M. Schouten, Centre for Mathematics and Computer Science (CWI), Amsterdam, The Netherlands

pp. 1087-1090



ABSTRACT



PDF



BUY ARTICLE

A Moving Object Tracked by A Mobile Robot with Real-Time Obstacles Avoidance Capacity

(Abstract)

Chung-Hao Chen, University of Tennessee, Knoxville, TN, 37996, USA
Chang Cheng, University of Tennessee, Knoxville, TN, 37996, USA
David Page, University of Tennessee, Knoxville, TN, 37996, USA
Andreas Koschan, University of Tennessee, Knoxville, TN, 37996, USA
Mongi Abidi, University of Tennessee, Knoxville, TN, 37996, USA

pp. 1091-1094



ABSTRACT



PDF



BUY ARTICLE

Scheduling of Image Processing Using Anytime Algorithm for Real-time System (Abstract)

Wyne Wyne Kywe, Aichi Prefectural University, Japan
Daisuke Fujiwara, Aichi Prefectural University, Japan
Kazuhito Murakami, Aichi Prefectural University, Japan

pp. 1095-1098



ABSTRACT



PDF



BUY ARTICLE

An Experimental Study on Automatic Face Gender Classification (Abstract)

Zhiguang YANG, Tsinghua University, Beijing 100084, China
Ming LI, Tsinghua University, Beijing 100084, China
Haizhou AI, Tsinghua University, Beijing 100084, China

pp. 1099-1102



ABSTRACT



PDF



BUY ARTICLE

Tensor Voting Accelerated by Graphics Processing Units (GPU) (Abstract)

Changki Min, University of Southern California
Gerard Medioni, University of Southern California

pp. 1103-1106



ABSTRACT



PDF



BUY ARTICLE

Blind Image Steganalysis Based on Statistical Analysis of Empirical Matrix (Abstract)

Xiaochuan Chen, Chinese Academy of Sciences, P.O.Box 2728, Beijing
Yunhong Wang, Beihang University, China
Tieniu Tan, Chinese Academy of Sciences, P.O.Box 2728, Beijing
Lei Guo, Chinese Academy of Sciences, P.O.Box 2728, Beijing

pp. 1107-1110



ABSTRACT



PDF



BUY ARTICLE

GMM-based SVM for face recognition (Abstract)

Herve BREDIN, CNRS-LTCI, GET-ENST, Paris , France
Najim DEHAK, CNRS-LTCI, GET-ENST, Paris , France
Gerard CHOLLET, CNRS-LTCI, GET-ENST, Paris , France

pp. 1111-1114



ABSTRACT



PDF



BUY ARTICLE

Omnidirectional Vision Tracking with Particle Filter

(Abstract)

Jaime Ortegon-Aguilar, CINVESTAV Unidad Guadalajara, Jalisco, Mexico.
Eduardo Bayro-Corrochano, CINVESTAV Unidad Guadalajara, Jalisco, Mexico.

pp. 1115-1118



ABSTRACT



PDF



BUY ARTICLE

Face Recognition by Expression-Driven Sketch Graph Matching

(Abstract)

Zijian Xu, University of California at Los Angeles Los Angeles, CA
Jiebo Luo, Kodak Research Laboratories Eastman Kodak Company Rochester, NY

pp. 1119-1122



ABSTRACT



PDF



BUY ARTICLE

Multi-view-based Cooperative Tracking of Multiple Human Objects in Cluttered Scenes

(Abstract)

Kuo-Chin Lien, National Tsing-Hua University Hsin-Chu, Taiwan
Chung-Lin Huang, National Tsing-Hua University Hsin-Chu, Taiwan

pp. 1123-1126



ABSTRACT



PDF



BUY ARTICLE

Tracking a Variable Number of Human Groups in Video Using Probability Hypothesis Density

(Abstract)

Ya-Dong Wang, National Univ. of Singapore, Singapore
Jian-Kang Wu, Institute for Infocomm Research, 21 Heng Mui Keng Terrace, Singapore
Ashraf A. Kassim, National Univ. of Singapore, Singapore
Wei-Min Huang, Institute for Infocomm Research, 21 Heng Mui Keng Terrace, Singapore

pp. 1127-1130



A Similarity Measure Based on Hausdorff Distance for Human Face Recognition (Abstract)

Yuankui Hu, University of Science and Technology of China, Hefei, Anhui, China

Zengfu Wang, University of Science and Technology of China, Hefei, Anhui, China

pp. 1131-1134



Comparison of Similarity Measures for Trajectory Clustering in Outdoor Surveillance Scenes (Abstract)

Zhang Zhang, Chinese Academy of Sciences, Beijing, China

Kaiqi Huang, Chinese Academy of Sciences, Beijing, China

Tieniu Tan, Chinese Academy of Sciences, Beijing, China

pp. 1135-1138



Face Recognition under Varying Lighting Based on the Probabilistic Model of Gabor Phase (Abstract)

Laiyun Qing, Institute of Computing Technology, CAS, No.6 Kexueyuan South Road, Beijing, 100080, China

Shiguang Shan, Graduate School, CAS, No.19, Yuquan Road, Beijing, 100039, China

Xilin Chen, Graduate School, CAS, No.19, Yuquan Road, Beijing, 100039, China

Wen Gao, Graduate School, CAS, No.19, Yuquan Road, Beijing, 100039, China

pp. 1139-1142



Finding Symmetry Plane of 3D Face Shape (Abstract)

Gang Pan, Zhejiang University, Hangzhou, 310027, China

Yueming Wang, Zhejiang University, Hangzhou, 310027, China

Yipeng Qi, Zhejiang University, Hangzhou, 310027, China

Zhaohui Wu, Zhejiang University, Hangzhou, 310027, China

pp. 1143-1146



A Low-dimensional Illumination Space Representation of Human Faces for Arbitrary Lighting Conditions (Abstract)

Yuankui Hu, University of Science and Technology of China,
Hefei, Anhui, China
Zengfu Wang, University of Science and Technology of China,
Hefei, Anhui, China

pp. 1147-1150



Automatic Texture Synthesis for Face Recognition from Single Views (Abstract)

Xiaozheng Zhang, Griffith University, Australia
Yongsheng Gao, Griffith University, Australia
Maylor K.H. Leung, Nanyang Technological University, Singapore

pp. 1151-1154



A Real-life Test of Face Recognition System for Dialogue Interface Robot in Ubiquitous Environments

(Abstract)
Fumihiko SAKAUE, Okayama University, Japan
Makoto KOBAYASHI, Okayama University, Japan
Tsuyoshi MIGITA, Okayama University, Japan
Takeshi SHAKUNAGA, Okayama University, Japan

pp. 1155-1160



Unusual Event Detection via Multi-camera Video Mining

(Abstract)
Hanning Zhou, Amazon.com, Inc., Seattle, WA
Don Kimber, Fuji-Xerox Palo Alto Laboratory Inc., Palo Alto, CA

pp. 1161-1166



Robust vehicle detection based on shadow

classification (Abstract)
Deaho Lee, Kyung Hee University,
Korea
Youngtae Park, Kyung Hee University,
Korea

pp. 1167-1170



Real-Time Detection of Anomalous Objects in Dynamic Scene (Abstract)
Satoshi KAWABATA, Osaka University,
Japan
Shinsaku HIURA, Osaka University,
Japan
Kosuke SATO, Osaka University,
Japan

pp. 1171-1174



A Comparison of Pixel, Edge and Wavelet Features for Face Detection using a Semi-Naive Bayesian Classifier (Abstract)
J. Ross Beveridge, Colorado State University Fort Collins, CO, USA
Jilmil Saraf, Colorado State University Fort Collins, CO, USA
Ben Randall, Colorado State University Fort Collins, CO, USA

pp. 1175-1178



Face Reconstruction with Low Resolution Facial Images by Feature Vector Projection in Kernel Space (Abstract)
Sang-Woong Lee, Korea University
Jooyoung Park, Korea University
Seong-Whan Lee, Korea University

pp. 1179-1182



3D Face Recognition using Normal Sphere and General Fourier Descriptor (Abstract)
Andrea F. Abate, University of Salerno, Italy
Michele Nappi, University of Salerno, Italy
Daniel Riccio, University of Salerno, Italy
Gabriele Sabatino, University of Salerno, Italy

pp. 1183-1186



A Viewpoint Invariant Approach for Crowd Counting

(Abstract)

Dan Kong, University of California,
Santa Cruz
Doug Gray, University of California,
Santa Cruz
Hai Tao, University of California,
Santa Cruz

pp. 1187-1190



Face Alignment Using Segmentation and a Combined AAM in a PTZ Camera

(Abstract)

Kwontaeg Choi, Yonsei University,
Seoul, South Korea
Jung-Ho Ahn, Yonsei University,
Seoul, South Korea
Hyeran Byun, Yonsei University,
Seoul, South Korea

pp. 1191-1194



New Experiments on ICP-Based 3D Face Recognition and Authentication (Abstract)

Boulbaba Ben Amor, Ecole Centrale de Lyon LIRIS Laboratory, CNRS, France
Mohsen Ardabilian, Ecole Centrale de Lyon LIRIS Laboratory, CNRS, France
Liming Chen, Ecole Centrale de Lyon LIRIS Laboratory, CNRS, France

pp. 1195-1199



Improving evidential quality of surveillance imagery through active face tracking

(Abstract)

Andrew D. Bagdanov, Universita degli Studi di Firenze, Firenze, Italy
Alberto del Bimbo, Universita degli Studi di Firenze, Firenze, Italy
Walter Nunziati, Universita degli Studi di Firenze, Firenze, Italy

pp. 1200-1203



ViSE: Visual Search Engine Using Multiple Networked

Cameras (Abstract)

U. Park, Michigan State Univ., USA
A. K. Jain, Michigan State Univ., USA
I. Kitahara, Univ. of Tsukuba, Japan
K. Kogure, ATR, Japan
N. Hagita, ATR, Japan

pp. 1204-1207

**Late Posters****Fusion Algorithm for Locally Arranged Linear Models****(Abstract)**

Florian Hoppe, Christian-Albrechts-
University of Kiel, Germany.
Gerald Sommer, Christian-Albrechts-
University of Kiel, Germany.

pp. 1208-1211

**Combining global and local classifiers with Bayesian network****(Abstract)**

Leonardo Nogueira Matos, Federal
University of Sergipe, Brazil
Joao Marques de Carvalho, Federal
University of Campina Grande, Brazil

pp. 1212-1215

**Perceptual Knowledge Extraction Using Bayesian Networks of Salient Image Objects****(Abstract)**

Roman M. Palenichka, University of
Quebec in Outaouais, Gatineau,
Canada
Marek B. Zaremba, University of
Quebec in Outaouais, Gatineau,
Canada

pp. 1216-1219

**Classification Using the Local Probabilistic Centers of k-Nearest Neighbors****(Abstract)**

Bo Yu Li, Fudan University, Shanghai,
200433, P.R. China
Yun Wen Chen, Fudan University,
Shanghai, 200433, P.R. China

pp. 1220-1223



Graph Matching using Commute Time Spanning Trees (Abstract)

Huaijun Qiu, University of York
Heslington, York, YO10 5DD, UK
Edwin R. Hancock, University of York
Heslington, York, YO10 5DD, UK

pp. 1224-1227

**Graph-based transformation manifolds for invariant pattern recognition with kernel methods** (Abstract)

Alexei Pozdnoukhov, Swiss Federal Institute of Technology Martigny, CH-1920, Switzerland
Samy Bengio, Swiss Federal Institute of Technology Martigny, CH-1920, Switzerland

pp. 1228-1231

**Feature Selection based on the Bhattacharyya Distance** (Abstract)

Guorong Xuan, Tongji University, Shanghai, China
Xiuming Zhu, Tongji University, Shanghai, China
Peiqi Chai, Tongji University, Shanghai, China
Zhenping Zhang, Tongji University, Shanghai, China
Yun Q. Shi, New Jersey Institute of Technology Newark, NJ
Dongdong Fu, New Jersey Institute of Technology Newark, NJ

pp. 1232-1235

**Learning an Optimal Naive Bayes Classifier** (Abstract)

Miriam Martinez-Arroyo, Instituto Tecnologico de Acapulco, Acapulco, Guerrero, Mexico
L. Enrique Sucar, INAOE Tonantzintla, Puebla, Mexico

pp. 1236-1239

**Benefits of Separable, Multilinear Discriminant Classification** (Abstract)

Christian Bauckhage, Deutsche Telekom Laboratories 10587 Berlin, Germany
Thomas Kaster, Bielefeld University,

Germany

pp. 1240-1243



ABSTRACT



PDF



BUY ARTICLE

A Global Geometric Approach for Image Clustering

(Abstract)

Sulan Zhang, Institute of Computing
Technology, Chinese Academy of
Sciences

Chunqi Shi, Institute of Computing
Technology, Chinese Academy of
Sciences

Zhiyong Zhang, Graduate School of
the Chinese Academy of Sciences

Zhongzhi Shi, Institute of Computing
Technology, Chinese Academy of
Sciences

pp. 1244-1247



ABSTRACT



PDF



BUY ARTICLE

Patterns of Co-Linear Equidistant Letter Sequences and Verses (Abstract)

Nachum Bombach, Economist Certified
Public Accountant Ramat Gan, Israel
Harold Gans, U.S. Department of
Defense Fort George G. Meade,
Maryland, U.S.A.

pp. 1248-1250



ABSTRACT



PDF



BUY ARTICLE

Author Index

Author Index (PDF)

p. 1251



ABSTRACT



PDF

Usage of this product signifies your
acceptance of the [Terms of Use](#).

This site and all contents (unless
otherwise noted) are Copyright
© 2006, IEEE, Inc. All rights
reserved.