

Final Program

Dicta2002: Digital Image Computing: Techniques and Applications
January 21 and 22 2002

Monday 21st January 2002

Dicta opening Plenary Session

9.00am-10.00am Hercus Theatre, Physics Building, The University of Melbourne

Speaker Dr. Ian Harper, Director Monash Micro-Imaging, "Image Processing and Pattern Recognition Opportunities in Medical and Biomedical Applications"

Dicta Conference Parallel Oral Sessions M1

10.05 am – 11.05 am MA1 (Hercus) and MA2 (Laby)Theatres, Physics Building, The University of Melbourne

MA1 (Chair - Prof. Anthony Maeder, Queensland University of Technology)

BPCS Steganography using EZW Encoded Images, Spaulding J., Noda H., Shirazi M.N., Niimi M., and Kawaguchi E.

Digital Watermarking for Gray-Level Watermarks, Chung Y.Y. and Wong M.T.

E-Shop with the Atmosphere of Physical Shop, Chung R. and He Y.

MA2 (Chair - Dr. Ian Harper, Director, Monash Micro-Imaging)

A Medical Feature Enhancing New Denoising Technique for Ultrasound Images, Stippel G., Philips W., Lemahieu P. and Govaert P.

Improving te Brake's Mammograohic Mass-Detection Algorithm Using Phase Congruency, Yates K. Evans C. and Brady M.

Progressively Refined Patient-Specific Vessel System Models from Generic Representations, Li R., Brown S. Wilson L. Young J. and Luo S

11.05 am-11.45 am Morning Tea

Dicta Conference Parallel Oral Sessions M2

11.45 am – 1.05 pm MA3 (Hercus) and MA4 (Laby)Theatres, Physics Building, The University of Melbourne

MA3 (Chair – Dr. Alireza Bab-Hadiashar, Swinburne University)

Robust Lip Tracking with Improved Active Shape Models, Luo S.

Application of Optical Flow Techniques in the Restoration of Non-Uniformly Warped Images, Clyde D., Fleming I.S., Fraser D., and Lambert A.

A Novel Filter for Block Based Object Motion Estimation, Sorwar G., Murshed M., and Dooley L.

Motion Estimation for Noise Reduction in Historical Films: MPEG Encoding Effects Chen F. and Suter D.

MA4 (Chair – Prof. Geoff McLachlan, Queensland University)

A Hybrid Opto-electronic Method for Real-time Automatic Verification of Handwritten Signatures, Fasquel J.B. and Bruynooghe M.

On-line Signature Verification Based on Pen-stroke Matching, Huang K. and Yan H

Human Posture Recognition from an Eigenspace, Rahman M.M., Nakamura K., and Ishikawa S.

Silhouette Extraction and Human Posture Classification on Still Images , Codina M., Tan T., and Mulhem P.

1.05 pm-2.15 pm

Lunch (Grand Buffet Hall, Union Building)

Dicta Conference Parallel Oral Sessions M3

2.15 pm – 3.35 pm MP1 (Hercus) and MP2 (Laby)Theatres, Physics Building, The University of Melbourne

MP1 (Chair – Dr. Changming Sun, CSIRO CMIS)

Robust Face Recognition Using Multiple Eye Positions, Li J., Qiao R.-Y., Lobb J., and Poulton G.

Recovering Modified Watermarked Audio Based on Dynamic Time-Warping Technique, Xu C., Lim Y. and Feng D.D.

Trials of the CSIRO Face Recognition System in a Video Surveillance Environment, Qiao R.Y., Lobb J., Li J., and Poulton G.T.

Face Registration Using Wearable Active Vision Systems for Augmented Memory, Kato T., Kurata T., and Sakaue K.

MP2 (Chair – Prof. Binh Pham, Queensland University of Technology)

Speedup Method for Real-Time Thinning Algorithm, Yin M. and Narita S.

Linear Feature Shape Characterization Using Structured Sampling, Maeder A. and Whelan K.

Resolution Enhancement for Photogrammetric Digital Images, Fryer J.G. and Scarmana G.

Community Exporation of Changing Landscape Values: the Role of the Virtual Environment, Chen X., Bishop I.D. and Hamid A.R.A.

ICTA Conference Poster Session (and afternoon tea)

3.35 pm – 5.00 pm Grand Buffet Hall, Union Building, The University of Melbourne
Programming Optimisation for Embedded Vision, Wardhani A. and Pham B.
Three Dimensional Quantitative Evaluation of Asymmetry in Facial Expressions., Gunaratne P. and Sato Y.
Investigation of a Hierarchical Fuzzy Model for Echocardiographic Assessment of Trans-valvular Hemodynamic Indexes, Gong J., Kirsner R., MacIsaac A., Drossos C. and Cameron J.
Peak-to-Average Power Reduction in Digital Television Transmitters, Armstrong J.
An Accurate Method for Skew Determination in Document Images, Lowther S., Chandran V. and Sridharan S.
Form Processing for Thai Documents, Premchaiswadi W. , Premchaiswadi N. , Vilailuk K. and Narita S.
Identifying, Visualising and Comparing Regions in 3D Surface Data, Thurley M.J.
Image Restoration of Images Obtained by Near-Horizontal Imaging through the Atmosphere, Jahromi M.R.S., Lambert A., Fraser D., Thorpe G., Clyde D., Webb J., and Tahtali M.
3D Shape Recovery Based on Radon Transform, Pintivirooj C. and Sangworasil M.
Portable VXL System for Computing Structure from Motion, McKinnon D., Kubik K. , and Lovell B.
Image Segmentation Employing Neural Networks and Multivariate Analysis, Liao Y.H. and Sun G.C.
A New Shape Dissimilarity Measuring Technique Between 3D Models Using Z-buffer and Surface Roving Method, Park I.K. , Lee K.M. , and Lee S.U.
Automated Analytical Determination of CNS Atrophy: A Comparative Study of an MR Image Subtraction Method (ISM) with Common Segmentation Algorithms, Taei-Tehrani M.R. and Cousins J.P.

5.00 p.m. APRS AGM – Venue: Grand Buffet Hall

ICTA Conference Dinner – Venue: Ormond College Dining Hall

6.30 pre-dinner drinks and appetisers

7.15 seated for dinner

Tuesday 22nd January 2002

ICTA Conference Parallel Oral Sessions T1

9.00 am – 10.20 am TA1 (Hercus) and TA2 (Laby)Theatres, Physics Building, The University of Melbourne

TA1 (Chair - Dr. P. Kovesi, University of Western Australia)

Fast Computation of the Gabor Wavelet Transform, Loy G.

Image Operations in Discrete Radon Space, Svalbe I.

Identification and Recovery of Injective Transforms, Mustafa A.A.Y.

Effects of Signal Quantisation and Spatial Sampling in Reconstructing Surface Density Profiles , Homolya S., Osborne C.F., and Svalbe I.D.

TA2 (Chair Dr. Mark Hedley – CSIRO TIP)

JPEG 2000 and Region of Interest Coding, Bradley A.P. and Stentiford F.W.M.

A Division-Based POCS Algorithm for Reducing Artifacts in BDCT Coded Images, Zou J.J. and Yan H.

Bandwidth Adaptation for MPEG-4 Video Streaming over the Internet, Ramkishor K. and Mammen J.P.

A Fast Fractal Image Coding Approach Employing Fuzzy Aggregation of Domain Blocks, Mahar K.M. and El-Sonni M.T.

ICTA Conference Poster Session (and morning tea)

10.20 am – 11.30 am Grand Buffet Hall, Union Building, The University of Melbourne

A FIR Based Video Format Conversion IC Design, Yue L., Sun J., Wang D. and Wang Z.

Active Contours: Recent Developments and a New Rational Approach to Segment Digital Images, Meegama R.G.N. and Rajapakse J.C.

A Comparative Study of Three Region Shape Descriptors, Zhang D. and Lu G.

SNAP&TELL: A Vision-Based Wearable System To Support "Web-On-The-World" Applications, Keaton T., Dominguez S.M., and Sayed A.H.

Auslan Jam: A Graphical Sign Language Display System, Lowe N., Strauss J., Yeates S. and Holden E.J.

A Data Warehousing Approach to Colour Image Retrieval, You J. and Liu J.

Projection Data and Scanograms in X-ray Computed Tomography, Horney R., Svalbe I. and Wells P.

On Speeding Up the EM Algorithm in Pattern Recognition: a Comparison of Incremental and Multiresolution KD-Tree-Based Approaches, Ng S.K. and McLachlan G.J.

A New Pseudo-Hierarchical Neural Network for Pattern Classification, Anand K., Murugesan S., and Ginige A.

An Investigation of Using K-d Tree to Improve Image Retrieval Efficiency, He Y., Lu G., and Teng S.W.

A Complete Set of Translation Invariants Based on the Cyclic Correlation Property of the Generalized Circular Transforms, Lohweg V. and Muller D.

Accurate Facial Colour Determination and Segmentation Compensated for Non-Uniform Image Lighting, Geometry and Camera Characteristics, Adriaansen T.

Image Retrieval from Compressed Images, Chung Y.Y. and Wong M.T.

An Evolutionary Connectionist Fuzzy System for Multispectral Data Classification, Mahar K.M.

Robust Fitting for Pattern Recognition, Ba-Hadiashar A., Suter D., and Hesami R.

DICTA Conference Parallel Oral Sessions T2

11.30 am – 12.30 pm TP1 (Hercus) and TP2 (Laby)Theatres, Physics Building, The University of Melbourne

TP1 (Chair - A/Prof. David Suter, Monash University)

Brushlet Features for Texture Image Retrieval, Chen C, Chan K.L., and Chen C.F.

Comparison of Background Models for Video Surveillance, Fettke M., Naylor M., Sammut K., and He F.

Real-Time Hausdorff-Based Tracking, Vignon D. and Lovell B.

TP2 (Chair – Prof. Raymond Jarvis, Monash University)

Texture Classification using Multiple Wavelet Analysis, Busch A. and Boles W.W.

Chin Extraction in Colour Frontal-view Face Images, Boursas S. and Yan H.

12.30 pm-1.30 pm

Lunch (Grand Buffet Hall, Union Building)

ACCV opening Plenary Session and DICTA closing Plenary Session

Speaker Prof. Kenichi Kanatani, Okayama University, “Model Selection for Geometric Inference”

Time 1.30 pm – 2.30 pm

Venue Hercus Theatre, Physics Building, The University of Melbourne

ACCV and DICTA Conference Tutorials

Tutorial 1 - Fast Algorithms for Stereo Matching – Dr. Changming Sun, (CSIRO)

Time 2.30 pm – 6.00 pm

Venue Physics Podium Room 2.08

Tutorial 2 - Complex Wavelets: an improved technique for multi-scale signal and image processing – Dr. Nick Kingsbury, (Cambridge)

Time 2.30 pm – 6.00 pm

Venue Physics Podium Room 2.09

Tutorial 3 - Model-Based Clustering via Gaussian Mixtures – Prof. Geoff McLachlan (UQ)

Time 2.30 p.m. – 6.00 p.m.

Venue Physics Podium Room 2.06