

08:00am–05:00pm	Registration	
09:00am–09:20am	Opening	
09:20am–10:40am	Tutorial 1: Satellite Image Analyses for Marine and Coastal Applications Presenter: Dr. Vincent Lyne (CSIRO Marine and Atmospheric Research, Australia) Session Chair: Ritaban Dutta	
10:40am–11:00am	Morning Tea	
11:00am–12:20pm	Tutorial 2: Multiview video coding using cuboid data compression Presenter: A/Prof. Manzur Murshed (Monash University) and Dr. Manoranjan Paul (Charles Sturt University) Session Chair: Ritaban Dutta	
12:20pm–01:20pm	Lunch	
Session: Computer Vision 1 (3 papers) Session Chair: Lei Wang		
01:20pm–01:40pm	Lin Gu, Cong Phuoc Huynh and Antonio Robles-Kelly <i>Reconstructing Polarisation Components from Unpolarised Images</i>	
01:40pm–02:00pm	Gustavo Carneiro, Zhibin Liao and Tat-Jun Chin <i>Closed-Loop Deep Vision</i>	
02:00pm–02:20pm	Khurram Aftab and Richard Hartley <i>Lq Averaging for Symmetric Positive-Definite matrices</i>	
Session: Face Recognition (3 papers) Session Chair: Clinton Fookes		
02:20pm–02:40pm	Syed Zulqarnain Gilani, Ajmal Mian and Faisal Shafait <i>Biologically significant facial landmarks; How significant are they for gender classification?</i>	
02:40pm–03:00pm	Douglas Brown, Yongsheng Gao and Jun Zhou <i>Learning Discriminative Local Patterns with Unrestricted Structure for Face Recognition</i>	
03:00pm–03:20pm	Xun Yu, Yongsheng Gao and Jun Zhou <i>A 3D Polygonal Line Chains Matching Method for Face Recognition</i>	
03:20pm–03:40pm	Afternoon Tea	
Session: Image Processing 1 (4 papers) Session Chair: Mark Pickering		
03:40pm–04:00pm	Aaron Marburg, Michael Hayes and Andrew Bainbridge-Smith <i>Pose Priors for Aerial Image Registration</i>	
04:00pm–04:20pm	Stephen Tierney, Junbin Gao and Geoff Bull <i>Image Matting for Sparse User Input by Iterative Refinement</i>	
04:20pm–04:40pm	Ang Li, Changyang Li, Xiuying Wang, Stefan Eberl, Michael Fulham and David Feng <i>Automated Segmentation of Prostate MR Images using Prior Knowledge Enhanced Random Walker</i>	
04:40pm–05:00pm	Mortuza Ali and Manzur Murshed <i>Undecoded Coefficients Recovery in Distributed Video Coding By Exploiting Spatio-Temporal Correlation: A Linear Programming Approach</i>	
05:00pm–06:30pm	APRS meeting Session Chair: Nick Redding	
	06:00pm–08:00pm	Reception and Networking Drinks

08:00am–05:00pm	Registration
09:00am–10:00am	Keynote Speech 1: Tangible imaging systems Presenter: A/Prof James Ferwerda, Xerox Chair in Imaging Science, Rochester Institute of Technology, NY, USA Session Chair: Ulrich Engelke
Session: Computer Vision 2 (3 papers) Session Chair: Matthew Thurley	
10:00am–10:20am	Hajananth Nallaivarothayan, David Ryan, Simon Denman, Sridha Sridharan and Clinton Fookes <i>An Evaluation of Different Features and Learning Models for Anomalous Event Detection</i>
10:20am–10:40am	Richard Palmer, Geoff West and Tele Tan <i>Using Depth to Extend Randomised Hough Forests for Object Detection and Localisation</i>
10:40am–11:00am	Sadeep Jayasumana, Richard Hartley, Mathieu Salzmann, Hongdong Li and Mehrtash Harandi <i>Combining Multiple Manifold-valued Descriptors for Improved Object Recognition</i>
11:00am–11:20am	Morning Tea
Session: Biomedical (4 papers) Session Chair: Eva Cheng	
11:20am–11:40am	Sze-Liang Stanley Chan, Yaniv Gal, Rosalind L. Jeffree, Michael Fay, Paul Thomas, Stuart Crozier and Zhengyi Yang <i>Automated Classification of Bone and Air Volumes for Hybrid PET-MRI Brain Imaging</i>
11:40am–12:00pm	Hien Nguyen, Andrew Janke, Geoffrey McLachlan, Nicolas Cherbuin, Perminder Sachdev and Kaarin Anstey <i>Spatial False Discovery Rate Control for Magnetic Resonance Imaging Studies</i>
12:00pm–12:20pm	Yuyao Zhang, Philip Ogunbona, Wanqing Li, Bridget Munro and Gordon Wallace <i>Pathological Gait Detection of Parkinson's Disease using Sparse Representation</i>
12:20pm–12:40pm	Shu-Kay Ng and Alfred K Lam <i>Automatic segmentation of molecular pathology images using a robust mixture model with Markov random fields</i>
12:40pm–02:00pm	Lunch
02:00pm–03:20pm	Poster Session 1 (20 papers) Session Chair: Ashfaqur Rahman Toshiaki Okabe and Kazuhiro Hotta <i>Accuracy Improvement of Melanosome Tracking by Error Correction</i> Mst. Nargis Aktar, Md. Jahangir Alam, Andrew Lambert and Mark Pickering <i>ROBUST 3D MULTI-MODAL REGISTRATION OF MRI VOLUMES USING THE SUM OF CONDITIONAL VARIANCE</i> Guohua Lv, Shyh Wei Teng, Guojun Lu and Martin Lackmann <i>Detection of Structural Similarity for Multimodal Microscopic Image Registration</i> Teng Zhang, Arnold Wiliem and Brian Lovell <i>Region-Based Anomaly Localisation in Crowded Scenes via Trajectory Analysis and Path Prediction</i> Ramana Murthy, Ibrahim Radwan, Abhinav Dhall and Roland Goecke <i>On the Effect of Human Body Parts in Large Scale Human Behaviour Recognition</i> Jamie Sherrah, Branko Ristic and Dmitri Kamenetsky <i>A Pedestrian Multiple Hypothesis Tracker Fusing Head and Body Detections</i> Masahide Kobayashi, Yoshitsugu Manabe and Noriko Yata <i>Interactive Estimation of Light Source Position and Reflectance of Real Objects for Mixed-Reality Application</i> Gao Zhu, Hongdong Li and Yansheng Ming <i>Object Cut as Minimum Ratio Cycle in a Superpixel Boundary Graph</i> Mohammad Tavakolian, Farshid Hajati, Ajmal Mian and Soheila Gheisari <i>Sparse Variation Pattern for Texture Classification</i>

Praveen Pullaperuma and Anuja Dharmaratne
Taxonomy of file fragments using Gray-Level Co-Occurrence Matrices

Alina Bialkowski, Patrick Lucey and Sridha Sridharan
Person Re-Identification Using Group Information

Kalyan Kumar Halder, Murat Tahtali and Sreenatha G. Anavatti
An Improved Image Restoration Method for Non-Uniformly Warped Images

Shannon Fehlmann, David Booth, Pranam Janney, Carmine Pontecorvo, Peter Aquilina, Tony Scoleri, Nick Redding and Robert Christie
Application of detection and recognition algorithms to persistent wide area surveillance

Dale Ward, Sebastien Wong, Ivan Lee and David Kearney
Chaining convolution and correlation in practice: a case study in visual tracking

Kaibin Zong, Arcot Sowmya and John Trinder
Kernel Partial Least Squares Based Hierarchical Building Change Detection using High Resolution Aerial Images and Lidar Data

Mohammad Awrangjeb and Guojun Lu
Building Roof Plane Extraction From LIDAR Data

Nabeel Mohammed and David Squire
ICFSIFT: Improving collection-specific CBIR with ICF-based local features

Long Sha, Patrick Lucey, Sridha Sridharan, Stuart Morgan and Dave Pease
Swimmer Localization from a Moving Camera

Anders Landström, Matthew Thurley and Håkan Jonsson
Adaptive Morphological Filtering of Incomplete Data

Nitin Mahadeo, Andrew Paplinski and Sid Ray
Robust Video Based Iris Segmentation System in Less Constrained Environments

03:20pm–03:40pm Afternoon tea

Session: Pattern Recognition 1 (3 papers)

Session Chair: David Squire

03:40pm–04:00pm Xinyu Wei, Long Sha, Patrick Lucey, Stuart Morgan and Sridha Sridharan
Large Scale Analysis of Formations in Soccer

04:00pm–04:20pm Akter Hussain, Alauddin Bhuiyan, Ajmal Mian and Kotagiri Ramamohanarao
Biometric Security Application for Person Authentication using Retinal Vessel Feature

04:20pm–04:40pm Chao Zhang, Chunhua Shen and Tingzhi Shen
Scale-Less Feature-Spatial Matching

Session: Computer Vision 3 (3 papers)

Session Chair: Cong Phuoc Huynh

04:40pm–05:00pm Jianjia Zhang, Lei Wang, Lingqiao Liu, Luping Zhou and Wanqing Li
Accelerating the Divisive Information-Theoretic Clustering of Visual Words

05:00pm–05:20pm Behzad Bozorgtabar and Roland Goecke
Robust Visual Vocabulary Tracking Using Hierarchical Model Fusion

05:20pm–05:40pm William Liu, Tat-Jun Chin, Gustavo Carneiro and David Suter
Point Correspondence Validation Under Unknown Radial Distortion

06:00pm–11:00pm Conference Dinner

08:00am–05:00pm	Registration
09:00am–10:00am	Keynote Speech 2: Perceptual Coding of Visual Signals: A leap of insight Presenter: Prof Hong Ren Wu, Royal Melbourne Institute of Technology, Australia Session Chair: Guojun Lu
Session: Pattern Recognition 2 (3 papers) Session Chair: Yaniv Gal	
10:00am–10:20am	Ruwan Tennakoon, Alireza Bab-Hadiashar, David Suter and Zhenwei Cao <i>Robust Data Modelling Using Thin Plate Splines</i>
10:20am–10:40am	Ross Marchant and Paul Jackway <i>Using Super-Resolution Methods to Solve a Novel Multi-Sinusoidal Signal Model</i>
10:40am–11:00am	Xinyu Wei, Patrick Lucey, Stuart Morgan and Sridha Sridharan <i>Predicting Shot Locations in Tennis using Spatiotemporal Data</i>
11:00am–11:20am	Morning Tea
Session: Image Processing 2 (4 papers) Session Chair: Ajmal Mian	
11:20am–11:40am	Khalid Yousif, Alireza Bab-Hadiashar and Reza Hoseinnezhad <i>3D Registration in Dark Environments Using RGB-D Cameras</i>
11:40am–12:00pm	Zsolt Sánta and Zoltan Kato <i>Pose Estimation of Ad-hoc Mobile Camera Networks</i>
12:00pm–12:20pm	Stephen Vidas and Peyman Moghadam <i>Ad hoc radiometric calibration of a thermal-infrared camera</i>
12:20pm–12:40pm	Kukulage Perera and Nick Barnes <i>1-Point Rigid Motion Estimation and Segmentation with a RGB-D Camera</i>
12:40pm–02:00pm	Lunch
02:00pm–03:20pm	Poster Session 1 (20 papers) Session Chair: Daniel Smith Nitin Mahadeo, Andrew Paplinski and Sid Ray <i>Automated Selection of Optimal Frames in NIR Iris Videos</i> Chris Jackett, Jennifer Lovell and Robert Ollington <i>Efficient Digital FFT Convolution with Boundary Kernel Renormalisation</i> Xueyan Dong, Michael Towsey, Jinglan Zhang, Jasmine Banks and Paul Roe <i>A Novel Representation of Bioacoustic Events for Content-based Search in Field Audio Data</i> Houssem Chatbri, Keisuke Kameyama and Paul Kwan <i>Sketch-Based Image Retrieval By Size-Adaptive and Noise-Robust Feature Description</i> Lei Tong, Jun Zhou, Chengyuan Xu, Yuntao Qian and Yongsheng Gao <i>Soil Biochar Quantification via Hyperspectral Unmixing</i> Chamara Weerasekera, Mohamed Jaward and Nader Kamrani <i>Robust ASL Fingerspelling Recognition Using Local Binary Patterns And Geometric Features</i> Tuan Q. Pham <i>Parallel implementation of geodesic distance transform with application in superpixel segmentation</i> Daniela Moctezuma, Cristina Conde, Isaac Martín de Diego and Enrique Cabello <i>Incremental Learning with soft-Biometric features for People Re-Identification in Multi-Camera Environments</i> Anders Landström, Matthew Thurley and Håkan Jonsson <i>Sub-Millimeter Crack Detection in Casted Steel using Color Photometric Stereo</i> Matthew Thurley <i>Automated Image Segmentation and Analysis of Rock Piles in an Open-Pit Mine</i> Kaneswaran Anantharajah, Simon Denman, Dian Tjondronegoro, Sridha Sridharan, Clinton Fookes and Felix Guo <i>Quality based Frame Selection for Face Clustering in News Video</i>

Mohammad Awrangjeb and Guojun Lu
A Performance Review of Recent Corner Detectors

Humayra Binte Ali and Professor David M W Powers
WAPA and OEPA based Facial Expression Recognition

Ruben Gonzalez
Robust Ring Detection In Phase Correlation Surfaces

Kapila Pahalawatta and Richard Green
Particle Detection and Classification in Photoelectric Smoke Detectors using Image Histogram Features

Umakanthan Sabanadesan, Simon Denman, Clinton Fookes and Sridha Sridharan
Semi-Binary Based Video Features for Activity Representation

Hussain Nyeem, Wageeh Boles and Colin Boyd
Utilizing Least Significant Bit-Planes of RONI Pixels for Medical Image Watermarking

Mafruha Mowrin Hossain, Abdullah A. Muhit, Mark R. Pickering, Jennie Scarvell and Paul Smith
A 3D-2D Image Registration Algorithm for Kinematic Analysis of the Knee after Total Knee Arthroplasty (TKA)

Fan Zhang, Yang Song, Weidong Cai, Yun Zhou, Shimin Shan and Dagan Feng
Context Curves for Classification of Lung Nodule Images

Yilun Fan, Yaniv Gal and Andrew Peter Bradley
Performance Analysis of Three Microscope Slide Scanning Techniques

03:20pm–03:40pm **Afternoon tea**

03:40pm–04:40pm **Keynote Speech 3: Images and Image Processing in Astronomy**
Session Chair: Paulo De Souza
Presenter: Prof. John Dickey, Head of School of Mathematics and Physics, University of Tasmania, Australia

04:40pm–05:00pm **Closing**