PROGRAM of Main Conference

Wednesday 25 Nov

8.30—9.30	Registrations
9.30—9.35	Opening by Brendan McCane, on behalf of PCs

Chair of morning sessions: Thomas Braeunl

9.35—10.35 Keynote 1. Embedded Realtime Computer Vision
Victor Erukhimov
Itseez, CEO

10.35—11.00 Brief Oral Presentations

1. Hideaki Orii, Hideaki Kawano, Noriaki Suetake and Hiroshi Maeda. Color Conversion for Color Blindness Employing Multilayer Neural Network with Perceptual Model
2. Fay Huang, Wu Bo Hui and Huang Bo-Ru. Synthesis of Oil-Style Paintings
3. Hsiang-Jen Chien, Haokun Geng, Chia-Yen Chen and Reinhard Klette. Multi-frame Feature Integration for Multi-camera Visual Odometry
4. Hiroyuki Kobayashi, Shoko Imaizumi and Hitoshi Kiya. A Robust Identification Scheme for JPEG XR Images with Various Compression Ratios
5. Hisayoshi Chugan, Tsuyoshi Fukuda and Takeshi Shakunaga. Challenge to scalability of face recognition using universal eigenface
6. Pascal Peter, Sebastian Hoffmann, Frank Nedwed, Laurent Hoeltgen and Joachim Weickert. From Optimised Inpainting with Linear PDEs towards Competitive Image Compression Codecs
7. Nidhi Saraswat and Hiranmay Ghosh. A Study on Size Optimization of Scanned Textual Documents
8. Hedi Hedayati, Michael Cree and Jonathan Scott. Combination of Mean Shift of Colour Signature and Optical Flow for Tracking During Foreground and Background Occlusion
9. Marvin Struwe, Ute Bauer-Wersing and Stephan Hasler. Rendered Benchmark Data Set for Evaluation of Occlusion-handling Strategies of a Parts-based Car Detector
10. Wooyeol Jun, Jeongmok Ha and Hong Jeong. Moving Object Detection Using Energy Model and Particle Filter for Dynamic Scene
11. Usman Khan and Reinhard Klette. Logarithmically Improved Property Regression for Crowd Counting
12. Tsuyoshi Higashiguchi, Toma Shimoyama, Norimichi Ukita, Masayuki Kanbara and Norihiro Hagita. Lesioned Part Identification by Classifying Entire-body Gait Motions
13. Yao-Jen Chang, Ching-Chieh Lin, Chao-Hsiung Hung, Jih-Sheng Tu, Chun-Lung Lin and Pei-Hsuan Tsai. Variable-Length Segment Copy for Compressing Index Map of Palette Coding in Screen Content Coding
14. Nga Do and Keiji Yanai. Automatic Action Dataset Construction from Web using Density-based Cluster Anaysis and Outlier Detection

11.00—11.30 Morning Tea,
Poster Session 1

| 11.30–12.30 | Oral Session 1. Image/Video Coding and Transmission (15 min. per talk) |

1. Pallab Podder, Manoranjan Paul and Manzur Murshed. Fast Coding Strategy for HEVC by Motion Features and Saliency Applied on Difference Between Successive Image Blocks
2. Jin Xu, Soufiene Djahel, Yuansong Qiao and Zhizhong Fu. Perceptually Rate-distortion Optimized Block Compressive Sensing for Image Compression
3. Yao-Jen Chang, Ching-Chieh Lin, Jih-Sheng Tu, Chun-Lung Lin, Chao-Hsiung Hung and Pei-Hsuan Tsai. Neighboring Sample Prediction Coding for HEVC Screen Content Coding

| 12.30–13.00 | Poster Session 1 |

| 13.00-14.00 | Lunch |

Session chair: NN

| 14.00–15.00 | Oral Session 2. Computational Photography and Arts |

1. Jinze Yu and Martin Constable. Aesthetic Interactive Hue Manipulation for natural scene Images
2. Chien-Quang Le, Thanh Duc Ngo, Duy-Dinh Le, Shin'Ichi Satoh and Duc Anh Duong. Cross-view Action Recognition by Projection-based Augmentation
3. Dongwei Liu, Haokun Geng and Reinhard Klette. Star-Effect Simulation for Photography Using Self-Calibrated Stereo Vision

| 15.00–15.30 | Afternoon tea
Poster Session 1 |

Session chair: NN

| 15.30–17.10 | Oral Session 3, Computer Vision and Applications |

1. Jeongmok Ha and Hong Jeong. A Robust Stereo Vision with Confidence Measure Based on Tree Agreement
2. Chun-Hau Tan, Md Baharul Islam, Lai-Kuan Wong and Kok-Lim Low. Semantics-Preserving Warping for Stereoscopic Image Retargeting
3. Ningqing Qian, Sohaib Kiani and Bahareh Shakibajahromi. Improved Poisson Surface with Various Passive Cues from Multiple Camera Views
4. Mohammed Abdessamad Bekhti and Yuichi Kobayashi. Prediction of Vibrations as a Measure of Terrain Traversability in Outdoor Structured and Natural Environments
5. Boris Bačić. Echo State Network for 3D Motion Pattern Indexing: A Case Study on Tennis Forehands

| 17.30–19.00 | Welcome reception |

9.00—9.30 Registrations

Chair of morning sessions: Xinguo Yu

9.30—10.30 Keynote 2 Perception for Off-road Driving
Hans J. (Joe) Wuensche
University of the Bundeswehr München

10.30—10.50 Brief Oral Presentations

15. Ahmed Ben Said and Sebti Foufou. Multispectral image denoising using Optimized vector NLM lter
16. Martin Bürker and Hendrik P. A. Lensch. Scene-based non-uniformity correction by readout noise compensation
17. Ryosuke Kubota, Hakaru Tamukoh, Hideaki Kawano, Noriaki Suetake, Byungki Cha and Takashi Aso. A Color Quantization Based on Vector Error Diffusion and Particle Swarm Optimization Considering Human Visibility
18. Yunfan Du, Fei Li and Rujie Liu. fast interactive image segmentation using bipartite graph based random walk with restart
19. Nirmala Ramakrishnan, Thambipillai Srikanthan, Siew Kei Lam and Gauri Tulsulkar. Adaptive Window Strategy for High-Speed and Robust KLT Feature Tracker
20. Mohamed Moustafa. Applying deep learning to classify pornographic images and videos
21. Hongge Ren, Weimin Liu, Fujin Li and Tao Shi. A Biomimetic Adaptive Fuzzy Edge Detection Method Based on Visual Features
22. Matthias Ochs, Henry Bradler and Rudolf Mester. Enhanced Phase Correlation for reliable and robust estimation of multiple motion distributions
23. Zaw Htet Aung and Panrasee Ritthipravat. Robust Visual Voice Activity Detection Using Long Short-Term Memory Recurrent Neural Network
24. Martin Heinold and Christian J. Kähler. Wing-surface reconstruction of a Lanner-falcon in free flapping flight with multiple cameras
25. Hiroki Morinaga, Michihiro Mikamo, Marco Visentini-Scarzanella, Hiroshi Kawasaki, Ryo Furukawa and Ryusuke Sagawa. Underwater Active Oneshot Scan with Static Wave Pattern and Bundle Adjustment
26. Kitsuchart Pasupa, Panawee Chatkamjuncharoen, Chotiros Wuttilertdeshar and Masanori Sugimoto. Using Image Features and Eye Tracking Device to Predict Human Emotions towards Abstract Images

10.50—11.30 Poster Session 2,
Morning Tea

11.30–12.30 Oral Session 4. Video Surveillance

1. Takao Yoshinuma, Hideitsu Hino and Kazuhiro Fukui. Personal Authentication based on 3D Configuration of Micro-Feature Points
2. Hyowon Ha, François Rameau and In So Kweon. 6-DOF Direct Homography Tracking with Extended Kalman Filter
3. Xuan-Phung Huynh, Yong-Guk Kim and In-Ho Choi. Tracking a Human Fast and Reliably Against Occlusion and Human-crossing

12.30–13.00 Poster Session 2

13.00–13.40 Lunch

Session chair: NN

13.40–15.00   Oral Session 5. Biomedical Image Processing and Analysis

1. Nabeel Khan, Kaier Wang, Ariane Chan and Ralph Highnam. Automatic BI-RADS classification of mammograms
2. Ryusuke Sagawa, Yusuke Yoshiyasu, Alexander Alspach, Ko Ayusawa, Katsu Yamane and Adrian Hilton. Analyzing Muscle Activity and Force with Skin Shape Captured by Non-contact Visual Sensor
3. Norliza Mohd. Noor, Omar Mohd. Rijal, Joel Chia Ming Than, Rosminah M. Kassim and Ashari Yunus. Regression as a tool to measure segmentation quality and preliminary indicator of diseased lungs
4. Masaki Ishihara, Yuji Matsuda, Masahiko Sugimura, Susumu Endo, Hiroaki Takebe, Takayuki Baba and Yusuke Uehara. Medical Image Registration with Radial Feature Points Sampling

15.00–16.00   Bus excursion, drive to Muriwai

16.00–16.45   Visit of the gannet colony at Muriwai

16.45-23.00   Drive to "Settlers Country Manor", drinks and nibbles in the garden,
                           South-Pacific cultural show, dinner in the banquet hall,
                           return by bus to Auckland city centre

Friday 27 Nov

9.00—9.30   Registrations

Chair of morning sessions: Mariano Rivera

9.30—10.30   Keynote 3.   Computer Vision for Precision Agriculture
                                            Richard Green
                                            University of Canterbury

10.30—10.50   Brief Oral Presentations

27. Xiao Lin, Josep R. Casas and Montse Pardas. Time consistent estimation of End-effectors from RGB-D data
28. Tommaso Cavallari and Luigi Di Stefano. Volume-based Semantic Labeling with Signed Distance Functions
29. Marco Visentini-Scarzanella and Hiroshi Kawasaki. Simultaneous Camera, Light Position and Radiant Intensity Distribution Calibration
30. Shubhra Aich and Chilwoo Lee. A General Vocabulary Based Approach for Fine-Grained Object Recognition
31. Michihiro Mikamo, Yoshinori Oki, Marco Visentini-Scarzanella, Hiroshi Kawasaki, Ryo Furukawa and Ryusuke Sagawa. A Triangle Mesh Reconstruction Method Taking into account Silhouette Images
32. Wen-Nung Lie and Chia-Che Ho. All-focus Image Fusion and Depth Image Estimation based on Iterative Splitting Technique for Multi-focus Images
33. Huei-Yung Lin and Chung-Chieh Kao. Stereo Matching for High Dynamic Range Image Pairs

34. Hayato Itoh, Atsushi Imiya and Tomoya Sakai. Discriminative Properties in Directional Distributions for Image Pattern Recognition
35. Mohammad Alam, Mohammed Bennamoun, Roberto Togneri and Ferdous Sohel. Deep Boltzmann Machines For i-Vector Based Audio-Visual Person Identification
36. Ali Khayeat, Xianfang Sun and Paul Rosin. Improved DSIFT Descriptor based Copy-Rotate-Move Forgery Detection
37. Chih-Wei Lin and Kuan-Yin Lu. Local Clustering Patterns in Polar Coordinate for Face Recognition

10.50—11.00   Brief Intro to Demos by Michael Cree

11.00–11.30   Morning Tea,
                   Poster Session 3,
                   Demos

11.30–12.30   Oral Session 6. Computer Vision and Pattern Recognition

   1. Dinh-Luan Nguyen, Vinh-Tiep Nguyen, Minh-Triet Tran and Atsuo Yoshitaka. Deep Convolutional Neural Network in Deformable Part Models for Face Detection
   2. Xiaohang Ren, Kai Chen, Xiaokang Yang, Yi Zhou, Jianhua He and Jun Sun. A Convolutional Neural Network Based Chinese Text Detection Algorithm With Text Structure
   3. Noriki Nishida and Hideki Nakayama. Multimodal Gesture Recognition using Multi-stream Recurrent Neural Network

12.30–13.00   Poster Session 3,
                   Demos

13.00-14.00   Lunch

Session chair: NN

14.00–15.20   Oral Session 7. Image/Video Processing and Analysis

   1. Zexuan Ji, Jinyao Liu, Hengdong Yuan, Yubo Huang and Quansen Sun. A Spatially Constrained Asymmetric Gaussian Mixture Model for Image Segmentation
   2. Domingo Mery, Erick Svec and Marco Arias. Object Recognition in Baggage Inspection Using Adaptive Sparse Representations of X-ray Images
   3. Vijay John, Zheng Liu, Chunzhao Guo, Seiichi Mita and Kiyosumi Kidono. Real-Time Lane Estimation using Convolutional Neural Networks and Extra Trees Regression
   4. Trung-Nghia Le and Akihiro Sugimoto. Contrast Based Hierarchical Spatial-Temporal Saliency for Video

15.20–15.40   Afternoon tea
                   Poster Session 3
                   Demos

Session chair: NN

15.40–17.00   Oral Session 8. . Pattern Recognition

1. Xupeng Wang, Ferdous Sohel, Mohammed Bennamoun and Hang Lei. Binary Descriptor based on Heat Diffusion for Non-rigid Shape Analysis
2. Xiaoyin Che, Haojin Yang and Christoph Meinel. Table Detection from Slide Images
3. Xiaohang Ren, Yi Zhou, Huiyu Wang, Kai Chen, Xiaokang Yang and Jun Sun. A Novel Scene Text Detection Algorithm Based On Convolutional Neural Network
4. Weiqi Yan and Mohan Kankanhalli. Face Search in Encrypted Domain

17.00-17.10   Program chairs announce best paper awards, closing of conference

19.00- late   **Survivors Party**