

ISM 2014

Sessions Overview

Regular Papers

Multimedia Database and Information Retrieval

Qiusha Zhu and Mei-Ling Shyu. Sparse Linear Integration of Content and Context Modalities for Semantic Concept Retrieval

Abir Gallas, Walid Barhoumi and Ezzeddine Zagrouba. Negative Relevance Feedback for Improving Retrieval in Large-scale Image Collections

Image and Video Processing

Kei Terayama, Hirohisa Hioki and Masa-Aki Sakagami. A Measurement Method for Speed Distribution of Collective Motion with Optical Flow and its Application to Estimation of Rotation Curve

Ngoc Nguyen and Atsuo Yoshitaka. Human Interaction Recognition using Independent Subspace Analysis Algorithm

Prarinya Siritanawan and Kazunori Kotani. Independent subspace of dynamic Gabor features for facial expression classification

Shun-Xuan Wang, Yu-Hsun Lin and Ja-Ling Wu. When Specular Object meets RGB-D Camera 3D Scanning: Color Image plus Fragmented Depth Map

Francesco Cricri, Sujeet Mate, Igor Curcio and Moncef Gabbouj. Salient Event Detection in Basketball Mobile Videos

Haruka Kumagai, Keisuke Doman, Ichiro Ide, Daisuke Deguchi and Hiroshi Murase. Scene Duplicate Detection from News Videos Using Image-Audio Matching Focusing on Human Faces

Audio Processing

Yin-Tzu Lin, Chuan-Lung Lee, Jyh-Shing Jang and Ja-Ling Wu. Bridging Music via Sound Effects

Li Luo, Guido H. Bruck and Peter Jung. A Novel Fundamental Frequency Estimator Based on Harmonic Pattern Match for Music Signals

Visualization, Computer Graphics, Virtual Reality

Guoyu Sun, Paisarn Muneesawang, Matthew Kyan, Haiyen Li, Ling Zhong, Nang Dong, Bruce Elder and Ling Guan. An Advanced Computational Intelligence System for Training of Ballet Dance in a Cave Virtual Reality Environment

Xin Zeng, Shunsuke Araki and Ken'ichi Kakizaki. An Extracting Method for Individual Building Wall Points from Mobile Mapping System Data

Modeling, Language, Interface and Tools for Multimedia Systems

Qiong Wu, Rui Gao, Xida Chen and Pierre Boulanger. Tagging Driven by Interactive Image Discovery: Tagging-Tracking-Learning

Marcio Moreno and Luiz Fernando Gomes Soares. Using Multiple Interleaved Time Bases in

Hypermedia Synchronization

Xueting Wang, Yuki Muramatu, Takatsugu Hirayama and Kenji Mase. Context-dependent Viewpoint Sequence Recommendation System for Multi-view Video

Multimedia Applications

Karthik Venkatraman, Suraj Raghuraman, Yuan Tian, Balakrishnan Prabhakaran, Klara Nahrstedt and Thiru Annaswamy. Quantifying and Improving User Quality of Experience in Immersive Tele-Rehabilitation

Cheng-I Wang and Shlomo Dubnov. Variable Markov Oracle: A Novel Sequential Data Points Clustering Algorithm with Application to 3D Gesture Query-Matching

Thiago L. F. Evangelista, Thales M. Priolli, Carlos N. Silla Jr., Bruno A. Angelico and Celso A. A. Kaestner. Automatic Segmentation of Audio Signals for Bird Species Identification

Roman Ganhör. Muvee: An Alternative Approach to Mobile Video Trimming

Short Papers

Multimedia Database and Information Retrieval

Wei-Ta Chu and Chih-Hao Chiu. Predicting Occupation from Single Facial Images

Tamires Barbieri and Rudinei Goularte. KS-SIFT: a keyframe extraction method based on local features

Luca Rossetto, Ivan Giangreco and Heiko Schuldt. Cineast: A Multi-Feature Sketch-Based Video Retrieval Engine

Søren Vind, Philip Bille and Inge Li Gørtz. Indexing Motion Detection Data for Surveillance Video

Ngo Truong Giang, Ngo Quoc Tao, Nguyen Duc Dung and Nguyen Trong The. Batch Mode Active Learning for Interactive Image Retrieval

Image and Video Processing

Manri Cheon and Jong-Seok Lee. Objective quality comparison of 4K UHD and up-scaled 4K UHD videos

Wei-Cih Jhou, Yu-Hsun Lin and Ja-Ling Wu. Seam Carving for Color-plus-Depth 3D Image

Nan Mu, Xin Xu, Li Chen and Jing Tian. Block-based salient region detection using a new spatial-spectral-domain contrast measure

Takahiro Hayashi and Motoki Sasaki. Contour Completion of Partly Occluded Skew-Symmetry Objects

Wen-Hung Liao, Chia-Yu Liu and Ming-Ching Lin. Feature Description Using Center-Symmetric Extended Local Ternary Patterns

Wei-Ta Chu and Ming-Hung Hsu. Fast Object Detection Using Multistage Particle Window Deformable Part Model

Bien-Van Nguyen, Duy Pham, Thanh Duc Ngo, Duy-Dinh Le and Anh Duc Duong. Integrating Spatial Information into Inverted Index for Large-Scale Image Retrieval

David Mera, Michal Batko and Pavel Zezula. Towards Fast Multimedia Feature Extraction: Hadoop or Storm

Fangzhou Luo, Ning Liao and Zhibo Chen. Mutual Synthesized View Comparison Method for No-

Reference 3D Image Quality Assessment

Ragnar Langseth, Vamsidhar Reddy Gaddam, Håkon Stensland, Pål Halvorsen and Carsten Griwodz. An evaluation of debayering algorithms on GPU for real-time panoramic video recording

Audio Processing

Wang Kong Lam and Tan Lee. Correcting Chord Classification Errors based on Tonal Organization Information of Classical Music

Toni Hirvonen. Speech/Music Classification of Short Audio Segments

Ernur Sonat Erdem and Dr. Mustafa Sert. Efficient Recognition of Human Emotional States from Audio Signals

Multimedia Networking and QoS

Roberto Roverso and Mikael Höggvist. Hive.js: Browser-Based Distributed Caching for Adaptive Video Streaming

Visualization, Computer Graphics, Virtual Reality

Luis Gaemperle, Kerem Seyid, Vladan Popovic and Yusuf Leblebici. An Immersive Telepresence System using a Real-Time Omnidirectional Camera and a Virtual Reality Head-Mounted Display

Modeling, Language, Interface and Tools for Multimedia Systems

Masaya Okamoto and Hideki Nakayama. Unsupervised Visual Domain Adaptation Using Auxiliary Information in Target Domain

Mobile Multimedia Systems and Services

Soo-Jin Kim, Chan-Byoung Chae and Jong-Seok Lee. On unequal power allocation for video communications using scalable video coding in massive MIMO systems

Multimedia Security

Ahmed Mokhtar Mansour and Mona Fouad. A Novel Blind Image Authentication: Eclectic Scheme

Chun-Hung Chen, Yuan-Liang Tang and Wen-Shyong Hsieh. An image authentication and recovery method using optimal selection of block types

Han Qiu and Gerard Memmi. Fast selective encryption method for bitmaps based on GPU acceleration

Multimedia Applications

Naimul Mefraz Khan, Stephen Lin, Ling Guan and Baining Guo. A Visual Evaluation Framework for In-Home Physical Rehabilitation

Che-Hua Yeh, Yi-Hsuan Yang, Ming-Hsu Chang and Mark Liao. Music Driven Human Motion Manipulation for Characters in a Video

Shun'Ichi Tano. 3D Sketch System based on Life-sized and Operable Concept Enhanced by Three Design Spaces

Martin Alexander Wilhelmsen, Håkon Stensland, Vamsidhar Reddy Gaddam, Asgeir Mortensen, Ragnar Langseth, Carsten Griwodz and Pål Halvorsen. Using a Commodity Hardware Video Encoder for Interactive Video Streaming

Yi-Peng Lin and Kuo-Wei Hsu. Dealing with Noisy Data on Point Cloud Models

Manel Fourati, Anis Jedidi and Faiez Gargouri. Towards a semantic multi-facet description of audiovisual documents

Industry Session

Shimei Pan and Mercan Topkara. Composite Search for Enterprise Distributed Multimedia Recorded Meetings

Karthik Venkatraman, Shanthi Vellingiri, Balakrishnan Prabhakaran and Nhut Nguyen. MPEG Media Transport (MMT) for 3D Tele-Immersion Systems

PhD Workshop

Hyung-II Kim, Seung Ho Lee and Yong Man Ro. Investigating Cascaded Face Quality Assessment for Practical Face Recognition System

Karol Jędrasiak and Aleksander Nawrat. SETH: The Method for Long-term Features Tracking

Demo Session

Injae Lee, Jihun Cha and Ohseok Kwon. Multi-modal Interaction System for smart TV environments

Abbas Javadtalab, Xiaoqing Zhu and Shervin Shirmohammadi. A FAST-ADJUSTING RATE CONTROL ALGORITHM USING NETWORK-ASSISTED SCHEME FOR HD VIDEO STREAMING

Posters

Payman Aflaki, Miska Hannuksela and Moncef Gabbouj. Adaptive Spatial Resolution Selection for Stereoscopic Video Compression with MV-HEVC: a Frequency Based Approach

Takahiro Hayashi and Reo Kishi. Utilization of NASA-TLX for Workload Evaluation of Gaze-Writing Systems

Yongyao Yan, Greg S. Ruthenbeck and Karen J. Reynolds. Haptic-driven Visual Playback

Guangyu Wang, Feng Liu and W. Yan. BRAILLE FOR VISUAL CRYPTOGRAPHY

Jia-Lien Hsu, Yan-Lin Zhen, Tzu-Chieh Lin and Yi-Shiuan Chiu. Personalized Music Emotion Recognition using Electroencephalography (EEG)