Technical Program

Friday, January 13

K1: Keynote: Opening - H. Samueli, Broadcom CTO
Connecting Everything: Dream Becomes Reality

T01-S02: Digital Camera Technology I

A Real-time Auto White Balance Algorithm for Mobile Phone Cameras
Buyue Zhang (Texas Instruments Inc., USA); Aziz U Batur (Texas Instruments, USA)
pp. 1-4

Blur-Free High-Sensitivity Imaging System Utilizing Combined Long/Short Exposure Green Pixels
Satoshi Sato (Panasonic Co., Ltd., Japan); Yusuke Okada (Panasonic Co., Ltd., Japan); Takeo Azuma (Panasonic Co., Ltd., Japan)
pp. 5-6

Temporal Exposure Inconsistency Correction for CMOS Captured Video Sequences
Dũng Trung Võ (Samsung Information Systems America (Samsung Electronics US R&D Center), USA); Surapong Lertrattanapanich (Digital Media Solutions Lab, Samsung Electronics US R&D Center, USA); Cao Bùi-Thu (Đại học City University of Industry, Vietnam); Yeong-Hwa Kim (Chung-Ang University, Korea)
pp. 7-8

A Simple Ghost-Free Exposure Fusion for Embedded HDR Imaging
Young-Su Moon (Samsung Advanced Institute of Technology, Korea); Yong Min Tai (Samsung Electronics, Korea); Joon Hyuk Cha (Samsung Electronics, Korea); Shihwa Lee (SAIT Samsung Electronics, Korea)
pp. 9-10

T02-S01: Audio Signal Processing 1

Virtual Reproduction of Spherical Multichannel Sound Over 5.1 Speaker System
Kangeun Lee (Samsung Electronics, Korea); Changyong Son (Samsung Electronics, Korea); Do-Hyung Kim (Samsung Electronics, Korea); Shihwa Lee (SAIT Samsung Electronics, Korea)
pp. 11-12

Realization of Surround Audio by a Quadraphonic Headset
Yi-Ming Shiu (National Central University, Taiwan); Tai-Ming Chang (National Central University, Taiwan); Pao-Chi Chang (National Central University, Taiwan)
**Active Noise Cancellation (ANC) for Stereo Headphones Using a Single Bluetooth Chip Solution**
Rogerio Alves (CSR - Cambridge Silicon Radio, USA); Walter Zuluaga (CSR - Cambridge Silicon Radio, USA)
pp. 15-16

**Superdirective Beamforming Using Microphone Array and Single Reflector**
Kenta Niwa (NTT Cyber Space Laboratories, Japan); Sumitaka Sakauchi (NTT, Japan); Ken'ichi Furuya (NTT Cyber Space Laboratories, Japan); Okamoto Manabu (NTT Cyber Space Laboratories, Japan); Yoichi Haneda (NTT Cyber Space Laboratories, Japan)
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**T05-S05: Personal Entertainment**

**S/W Upgrade for On-Vehicle Information Devices**
Ryozo Kiyohara (Mitsubishi Electric Corporation, Japan); Koichi Tanaka (Mitsubishi Electric Corporation, Japan); Yoshiaki Terashima (Mitsubishi Electric Corp., Japan)
pp. 19-20

**A Flexible Textile Wristwatch Using Transfer Printed Textile Circuit Technique**
Sungyong Shin (Electronics and Telecommunications Research, Korea); Baesun Kim (Electronics and Telecommunications Research Institute, Korea); Yong Ki Son (Electronics and Telecommunications Research Institute, Korea); Ji Eun Kim (Electronics and Telecommunications Research Institute, Korea); Il-Yeon Cho (Electronics and Telecommunications Research Institute, Korea)
pp. 21-22

**Virtual USB Drive: A Key Component for Smart Home Storage Architecture**
Youngjin Nam (Daegu University & University of Minnesota, Korea); Dongchul Park (University of Minnesota, USA); David Du (University of Minnesota, USA)
pp. 23-24

**Automated System for Testing and Verification of Control Access Kernel Functionality in Set-Top Boxes**
Vukota Pekovic (RT-RK d.o.o., Serbia); Vladimir Zlokolica (University of Novi Sad, Serbia); Jan Zloh (RT-RK Computer Based Systems, Serbia); Mihajlo Katona (RT-RK d.o.o., Serbia); Nikola Teslic (University of Novi Sad, Serbia)
pp. 25-26

**A Cognitive Radio Indoor HDTV Multi-Vision System in the TV White Spaces**
Mauro Fadda (University of Cagliari, Italy); Maurizio Murroni (University of Cagliari, Italy); Vlad Popescu (Transilvania University of Brasov & Universiy of Cagliari, Italy, Romania)
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**TUT-1: Mobile Cloud Computing**

Presenter: Dijiang Huang
**T01-S02b: Digital Camera Technology II**

**Seamless and Fast Panoramic Image Stitching**
Joon Hyuk Cha (Samsung Electronics, Korea); Youngsun Jeon (Samsung Electronics, Korea); Young-Su Moon (Samsung Advanced Institute of Technology, Korea); Shihwa Lee (SAIT Samsung Electronics, Korea)
pp. 29-30

**Chromatic Aberration Removal in Narrow Color Regions of Digital Images**
Hae Jin Ju (Sogang University, Korea); Dong-Kyu Lee (Sogang University, Korea); Rae-Hong Park (Sogang University, Korea)
pp. 31-32

**A Fast Blink Detector Using Canonical Correlation Analysis**
Mithun Uliyar (Nokia, India); Soumik Ukil (Nokia, India)
pp. 33-34

**Low Light Imaging System with Expanding Spectrum Band for Digital Camera**
Byung Kwan Park (Samsung Electronics, Samsung Advanced Institute of Technology, Korea); Sang-Wook Han (Samsung Electronics, Samsung Advanced Institute of Technology, Korea); Wonhee Choe (Samsung Electronics, Samsung Advanced Institute of Technology, Korea); JaeGuyn Lim (Samsung Electronics, Samsung Advanced Institute of Technology, Korea); Youngjin Yoo (SAMSUNG Advanced Institute of Technology, Korea); Seong-Deok Lee (Samsung Electronics, Samsung Advanced Institute of Technology, Korea)
pp. 35-36

**An Efficient Red Eye Reduction Technique**
Basavaraja S Vandrotti (Nokia, India); Muninder Veldandi (Nokia, India); Krishna Govindaraao (Nokia, India); Mithun Uliyar (Nokia, India); Pranav Mishra (Nokia, India)
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**T02-S02: Audio Signal Processing 2**

**A Two Microphone-Based Approach for Speech Enhancement in Adverse Environments**
Kai Li (Key Laboratory of Speech Acoustics and Content Understanding, Chinese Academy of Sciences, P.R. China); Yanmeng Guo (Key Laboratory of Speech Acoustics and Content Understanding, P.R. China); Qiang Fu (Key Laboratory of Speech Acoustics and Content Understanding, P.R. China); Yonghong Yan (Key Laboratory of Speech Acoustics and Content Understanding, P.R. China)
pp. 41-42
**Music Relationship Visualization Based on Melody Transition Using Conditional Divergence for Music Browsing System**
Takashi Maekaku (The University of Electro-Communication, Japan); Hiroyuki Kasai (The University of Electro-Communications, Japan)
pp. 43-44

**An Auto-Focusing-NoiseSuppressor for Cellphone Movies Based on Multiple Noise References**
Akihiko K. Sugiyama (NEC Corporation, Japan); Ryoji Miyahara (NEC Engineering Ltd., Japan)
pp. 45-46

**Implementation of Sound-enhanced Landscape Album Using Environmental Sound Provisioning System**
Satoshi Innami (The University of Electro-Communications, Japan); Reona Mogi (The University of Electro-Communications, Japan); Hiroyuki Kasai (The University of Electro-Communications, Japan)
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**T11-S04: Personal Cloud**

**Data Synchronization Between Adjacent User Devices for Personal Cloud Computing**
Eunjeong Choi (ETRI, Korea); Chang Seok Bae (ETRI, Korea); Jeunwoo Lee (ETRI, Korea)
pp. 49-50

**Content Authentication Method for Extended Home Multimedia and Personal Cloud Services**
DaeYoub Kim (Samsung Electronics, Korea); Jihoon Lee (Samsung Electronics, Korea); Misuk Huh (Samsung Electronics, Korea); Eunah Kim (Samsung Advanced Institute of Technology, Korea)
pp. 51-52

**Trust-Aware Federated IdM in Consumer Cloud Computing**
Rosa Sánchez (Carlos III University of Madrid, Spain); Patricia Arias (Universidad Carlos III de Madrid, Spain); Florina Almenares (Universidad Carlos III de Madrid, Spain); Daniel Díaz-Sánchez (Universidad Carlos III de Madrid, Spain)
pp. 53-54

**Realistic IEEE 802.11E EDCA Model for QoS-aware Cloud Service Provisioning**
Shahnaza Tursunova (Yeungnam University, Korea); Young-Tak Kim (Yeungnam University, Korea)
pp. 55-56

**A Method for Implementing Dynamic, Cloud-based Metadata Services Based on a Unified Content ID Space Across a Fragmented CE Ecosystem**
Michael Papish (Rovi Corporation, USA)
pp. 57-60
TUT-2: Smart Grid and Demand Response Ready Consumer Electronics.

Presenter: Angela Chuang, EPRI

Break - Fri PM

T01-S03: Real Time Imaging

Real Time Video Stabilization with Reduced Temporal Mismatch and Low Frame Buffer
Dũng Trung Võ (Samsung Information Systems America (Samsung Electronics US R&D Center), USA); Surapong Lertrattanapanich (Digital Media Solutions Lab, Samsung Electronics US R&D Center, USA); Cao Bui-Thu (Ho Chi Minh City University of Industry, Vietnam); Yeong-Hwa Kim (Chung-Ang University, Korea)
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Low Latency LDGM Code for Multimedia-Packet Stream in Bursty Packet Loss Networks
Filippo Casu (Universidad Politécnica de Madrid, Spain); Julián Cabrera (Universidad Politécnica de Madrid, Spain); Fernando Jaureguizar (Universidad Politécnica de Madrid, Spain); Narciso García (Universidad Politécnica de Madrid, Spain)
pp. 63-64

Very Low-Delay H.264 Codec for Consumer Applications
Hiroki Mizosoe (Hitachi, Ltd., Japan); Mitsuhiro Okada (Hitachi, Ltd., Japan); Hironori Komi (Hitachi, Ltd., Japan); Manabu Sasamoto (Hitachi, Ltd., Japan); Yoshinori Hatori (Tokyo Institute of Technology, Japan)
pp. 65-66

Real-Time Interpolation Using Bilateral Filter for Image Zoom or Video Up-Scaling/Transcoding
Kwok-Wai Hung (The Hong Kong Polytechnic University, Hong Kong); Wan-Chi Siu (The Hong Kong Polytechnic University, Hong Kong)
pp. 67-68

High-Quality Real-time Temporal Segmentation Tool
Carlos Cuevas (Universidad Politécnica de Madrid, Spain); Narciso García (Universidad Politécnica de Madrid, Spain)
pp. 69-70

T02-S03: Home Audio and ALMA

Stability-Improved Higher Order Delta-Sigma Modulator for Hi-Fi Docking Audio System
Jaeyong Cho (Samsung, Korea); Jungmin Choi (Samsung, Korea); Haekwang Park (Samsung Electronics, Korea); Yongje Kim (Samsung, Korea)
Low-level Feature Selection for Emotional Music Preferences Based on Subjective Audience Rating
Jonghyung Lee (Konkuk University & MBM Laboratory, Korea); Min-Uk Kim (Konkuk University, Korea); Kyoungro Yoon (Konkuk University, Korea)
pp. 73-74

Interacting with Semantic Musical Features: Enhanced Human-Computer Interactions Based on Musical "Meaning"
Gang Ren (University of Rochester, USA); Gregory Bocko (University of Rochester, USA); Justin Lundberg (University of Rochester, USA); Stephen Roessner (University of Rochester, USA); Mark Bocko (University of Rochester, USA); Dave Headlam (University of Rochester, USA)
pp. 75-76

Audio Phase Singularity Detection for Room Acoustics Parameter Estimation
Gang Ren (University of Rochester, USA); Gregory Bocko (University of Rochester, USA); Stephen Roessner (University of Rochester, USA); Justin Lundberg (University of Rochester, USA); Dave Headlam (University of Rochester, USA); Mark Bocko (University of Rochester, USA)
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T12-S01: Energy Management I - Invited

Energy Saving Potential of Converged ICT and CE
Barbara Schlomann (Fraunhofer Institute for Systems and Innovation Research ISI, Germany); Lutz Stobbe (Fraunhofer Institute for Reliability and Microintegration IZM, Germany); Nils F. Nissen (Fraunhofer Institute for Reliability and Microintegration IZM, Germany)
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New Opportunities From ENERGY STAR "Connected" Appliances
Katharine Kaplan (US EPA, USA); Amanda Stevens (US EPA, USA)
pp. 81-82

T14-S01: Smart Grid Monitoring and Power Line Communication

In-Building Lighting Management System with Wireless Communications
Francisco J. Bellido Outeirino (University of Córdoba, Spain); Francisco Domingo-Perez (University of Cordoba, Spain); Aurora del Rocio Gil-de-Castro (Universidad de Córdoba, Spain); José Flores Arias (Universidad de Cordoba, Spain); Antonio Moreno-Munoz (University of Córdoba, Spain)
pp. 83-85
Reliable Power Line Communication - A Vehicle to Smart Home and Smart Energy
Xiaolin Lu (Texas Instruments, Inc., USA); Yanjun Sun (Texas Instruments & Rice University, USA); Il Han Kim (Texas Instruments, USA)
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Welcome Reception

Saturday, January 14

T01-S06: Video Coding Techniques

Non-integer Bit Estimation for Rate-Distortion Optimized Video Coding
Sio Kei Im (Macao Polytechnic Institute, Macao); Mohammad Mahdi Ghandi (Macao Polytechnic Institute, Macao); Chan-Tong Lam (Macao Polytechnic Institute, Macao)
pp. 88-89

Fast Inter-mode Decision Algorithm for H.264/AVC Using Macroblock Correlation and Motion Complexity Analysis
Badrul Hilmi (SunMoon University, Korea); Kalyan Goswami (SunMoon University, Korea); Jong-Hyuk Lee (SunMoon University, Korea); Byung-Gyu Kim (SunMoon University, Korea)
pp. 90-91

Content Aware Video Encoding for Adaptive HTTP Streaming
Velibor Adzic (Florida Atlantic University, USA); Hari Kalva (Florida Atlantic University, USA); Borko Furht (Florida Atlantic University, USA)
pp. 92-93

Quality-guided Adaptivity for Audiovisual Content Streaming by MPEG DASH
Cong Thang Truong (The University of Aizu, Japan); Jungwon Kang (ETRI, Korea); Anh T. Pham (The University of Aizu, Japan)
pp. 94-95

T06-S03: Network Technology

Delay Constrained Resource Allocation for Wireless Home Networks
Waqar Aslam (Eindhoven University of Technology, The Netherlands); Johan J. Lukkien (Eindhoven University of Technology, The Netherlands)
pp. 96-97

Conciliating Remote Home Network Access and MAC-address Control
Stephane Onno (Technicolor, France); Christoph Neumann (Technicolor, France); Olivier Heen (Technicolor, France)
pp. 98-99
Cooperative Neighbor Discovery for Consumer Devices in mmWave Ad-Hoc Networks
Hyunhee Park (Korea University, Korea); Yongsun Kim (ETRI & Korea University, Korea); Insun Jang (Korea University, Korea); Sangheon Pack (Korea University, Korea)
pp. 100-101

Mobility Management Scheme for Supporting Legacy Clients in IEEE 802.11S WMNs
Sungwon Lee (Kyungpook National University, Korea); Hong-Jong Jeong (Kyungpook National University, Korea); Dongkyun Kim (Kyungpook National University, Korea)
pp. 102-103

A Prefix-based Smart Search in Content-Centric Networking
Bae Youngin (Samsung Advanced Institute of Technology, Korea); JaeHoon Kim (Samsung Electronics, Korea); Myeong-Wuk Jang (Samsung Electronics, Korea); Byoung-Joon BJ Lee (Samsung Advanced Institute of Technology, Korea)
pp. 104-105

T11-S02: 3D Orientation and Localization

Selective Device Activation for Power Reduction in Accelerometer-Based Wearable Guidance Systems for the Blind
YeongJu Lee (Inha University, Korea); Minseok Song (Inha University, Korea)
pp. 106-107

Detection and Localization of People in Living Room Using a New Background Subtraction Method
DongRyeol Park (Samsung Electronics, Korea); Kiwan Choi (Samsung Electronics, Korea); Joon-Kee Cho (Samsung Advanced Institute of Technology, Korea); Yeon-Ho Kim (Samsung Electronics & Purdue University, Korea)
pp. 108-109

A Human Detection Method for Residential Smart Energy Systems Based on Zigbee RSSI Changes
Bojan Mrazovac (Faculty of Technical Sciences, University of Novi Sad & RT-RK Computer Based Systems LLC, Serbia); Milan Z. Bjelica (University of Novi Sad, Serbia); Dragan Kukolj (University of Novi Sad, Serbia); Branislav M. Todorović (RT-RK Institute for Computer Based Systems, Serbia); Nikola Teslic (University of Novi Sad, Serbia)
pp. 110-111

Computing the Six Degrees of Freedom of Light Emitting Diodes in a Monocular Image
Mark Edleblute (Penn State Harrisburg, USA); Sedig S Agili (Penn State University, USA); Aldo Morales (Penn State Harrisburg, USA); Robert Gray (The Pennsylvania State University, USA)
pp. 112-113
Self-positioning System for Indoor Navigation on Mobile Phones
Van Vinh Nguyen (Sejong University, Korea); Jong Weon Lee (Sejong University, Korea)
pp. 114-115

TUT-3: Building and Using Virtual Humans
Presenter: William Swartout, USC

K3: Keynote: History and Future of Display Technology, Hiro Kawamoto

Break - Saturday AM

Poster Session P1: Image and Video Technology

The Design and Implementation of a Stereoscopic Video Broadcasting System Using Repeated Content
Kwanghee Jung (Electronics and Telecommunications Research Institute, Korea); Hyun-Jeong Yim (Electronics and Telecommunications Research Institute (ETRI), Korea); Kug-jin Yun (Electronics and Telecommunications Research Institute, Korea); Won-Sik Cheong (ETRI, Korea); Nahmo Hur (Electronics and Telecommunications Research Institute, Korea)
pp. 116-117

Content-Aware Intra-Refresh for Video Streaming Over Lossy Links
Ismail Ali (University of Essex, United Kingdom); Martin Fleury (University of Essex, United Kingdom); Mohammad Ghanbari (University of Essex, United Kingdom)
pp. 118-119

Image Magnification by Modifying DCT Coefficients
Jeong Ho Lee (Hanyang University, Korea); Jong Min Lee (Hanyang University, Korea); Ki Tae Park (Hanyang University, Korea); Young Shik Moon (Hanyang University, Korea)
pp. 120-121

Content Indexing for Specific Scenes in Baseball Videos Utilizing Two-Dimensional Matching of Intensity Patterns
Kazutake Uehira (Kanagawa Institute of Technology, Japan); Gengo Tanaka (Kanagawa Institute of Technology, Japan); Kayo Suzuki (IKEDA Technologies, Inc., Japan); Kazumi Komiya (Kanagawa Institute of Technology, Japan); Hiroaki Ikeda (IKEDA Technologies, Inc., Japan)
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Selective Frequency Decomposition in the Wavelet Domain for Single Image-Based Super-Resolution
Seonyung Kim (Chung-Ang University, Korea); Donggyun Kim (Image Processing and Intelligent Systems Laboratory, Chung-Ang University, Korea); Tae-Chan Kim (Samsung Electronic Co. Ltd., Korea); Monson Hayes
Subjective Verification of High Quality Panoramic Image Generated by Multiple PAL Images
Satoshi Araki (University of Toyama, Japan); Keiji Shibata (University of Toyama, Japan); Yuukou Horita (University of Toyama, Japan)
pp. 126-127

Detection of Visual Saliency in Discrete Cosine Transform Domain
Ki Tae Park (Hanyang University, Korea); Min Su Park (Hanyang University, Korea); Jeong Ho Lee (Hanyang University, Korea); Young Shik Moon (Hanyang University, Korea)
pp. 128-129

Fast Mode Decision Algorithm for B-Picture in Full Scalable Video Coding Using Coded Block Pattern
Tae-Jung Kim (Chungbuk National University, Korea); Hyang-mi Yoo (Chungbuk national university, Korea); Jae-Won Suh (Chungbuk National University, Korea)
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Gaze Location Prediction in Broadcast Football Video
Qin Cheng (University of Bristol, United Kingdom); Dimitris Agrafiotis (University of Bristol, United Kingdom); Alin M Achim (University of Bristol, United Kingdom); David Bull (University of Bristol, United Kingdom)
pp. 132-135

Pilot-based 2D-Barcode Image Restoration Using Successive Interference Cancellation
Chanwoo Chun (Daegu University, Korea); Jung-Young Son (Daegu University, Korea)
pp. 136-138

Fog-degraded Image Restoration Using Characteristics of RGB Channel in Single Monocular Image
Dubok Park (Korea University & School of Electrical Engineering, Korea); Hanseok KO (Korea University, Korea)
pp. 139-140

Adaptive View-Area and Quality Scaling for Interactive Free View-Area Tile-based Multivision Video
Naofumi Uchihara (The University of Electro-Communications, Japan); Hiroyuki Kasai (The University of Electro-Communications, Japan)
pp. 141-142

Robust Shadow Removal Algorithm for Accurate Object Detection Based on Background Subtraction Method
Yun-Ho Ko (Chungnam National University, Korea); Jong-Won Park (KORDI, Korea); Hyun-Soo Kang (Chungbuk National University, Korea)
pp. 143-144
Automatic Knowledge Construction of Scene Composition Using Object Categorization on Images
Go Kikuchi (The University of Electro-Communications, Japan); Hiroyuki Kasai (The University of Electro-Communications, Japan)
pp. 145-146

Real-Time LUT-Based Color Correction for Cell Phone Cameras in Low Light Conditions Without Frame Memory
Lin-bo Luo (Hanyang University, Korea); Sangwoo Ahn (Hanyang University, Korea); Chang-shuai Wang (Hanyang University, Korea); Jun Chen (Huazhong University of Science and Technology, Korea); Jong-Wha Chong (Hanyang University, Korea)
pp. 147-148

Optimal Exposure Detection Function for Digital and Smart-Phone Camera Applications
Siamak Yousefi (University of Texas at Dallas, USA); Hamid Reza Rabiee (Sharif University of Technology, Iran); Poorya Mianjy (Sharif University, Iran)
pp. 149-150

A Fast Luminance Intra 4X4 Prediction Mode Decision Method by Statistical Analysis of Residual Data in H.264/AVC
DaeYoung Noh (Kwangwoon University, Korea); Jieun Kim (Kwangwoon University, Korea); Chae-Bong Sohn (Kwangwoon University, Korea); Seoung-Jun Oh (Kwangwoon University, Korea)
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A Fine Directional Deinterlacing Using Virtual Edge Distribution
Sye-Hoon Oh (GalaxiaCommunications co., Ltd, Korea); Yeo-Song Lee (Galaxia Communications Co., Ltd., Korea); Heon-Joo Kim (GalaxiaCommunications, Korea); SeongHoon Kim (GalaxiaCommunications, Korea)
pp. 153-155

A Selective Area Based Depth Estimation for Three Dimensional Camera
Ikhyun Lee (Gwangju Institute of Science and Technology, Korea); Tae-Sun Choi (Gwangju Institute of Science and Technology, Korea)
pp. 156-157

Comparing MPEG AVC and SVC for Adaptive HTTP Streaming
Hari Kalva (Florida Atlantic University, USA); Velibor Adzic (Florida Atlantic University, USA); Borko Furht (Florida Atlantic University, USA)
pp. 158-159

Effective Synchronisation of Hybrid Broadcast and Broadband TV
Lourdes Beloqui Yuste (National University of Ireland, Galway, Ireland); Salah M Saleh Al-Majeed (University of Essex, United Kingdom); Hugh Melvin (National University of Ireland, Galway, Ireland); Martin Fleury (University of Essex, United Kingdom)
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3D Videoconferencing System Using Spatial Scalability
Miguel Chavarrias (Universidad Politécnica de Madrid, Spain); Fernando Pescador (Universidad Politécnica de Madrid, Spain); Fernando Jaureguizar
A Rate-Distortion Cost Estimation Approach to Fast Intra Prediction in Video Coding for Ultra High Definition TV Applications
Younhee Kim (Electronics and Telecommunications Research Institute, Korea)
pp. 164-165

T01-S12: 3D Video Distribution 1 - Systems

MVC Real-time Video Encoder for Full-HDTV 3D Video
Mitsuo Ikeda (NTT, Japan); Takayuki Onishi (NTT, Japan); Takashi Sano (NTT, Japan)
pp. 166-167

Multiview and Depth Map Compression Based on HEVC
Glenn Van Wallendael (Ghent University - IBBT, Belgium); Sebastiaan Van Leuven (Ghent University - IBBT, Belgium); Jan De Cock (Ghent University - IBBT, Belgium); Fons Bruis (Philips Research, The Netherlands); Rik Van de Walle (Ghent University - IBBT, Belgium)
pp. 168-169

Bitrate Reduction in Asymmetric Stereoscopic Video with Low-pass Filtered Slices
Sima Valizadeh (University of British Columbia, Canada); Maryam Azimi (University of British Columbia, Canada); Panos Nasiopoulos (University of British Columbia, Canada)
pp. 170-171

Monitoring Packet Loss Impact in IPTV and 3DTV Receivers
Jesús Gutiérrez (Universidad Politécnica de Madrid, Spain); Pablo Pérez (Alcatel-Lucent, Spain); Fernando Jaureguizar (Universidad Politécnica de Madrid, Spain); Julián Cabrera (Universidad Politécnica de Madrid, Spain); Narciso García (Universidad Politécnica de Madrid, Spain)
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T07-S01: RF and Receiver Techniques

A Blindly Optimized Compressive Sensing Receiver for Cognitive Radio
Mohammed Farrag (Egypt-Japan University of Science and Technology, Egypt); Mostafa El-Khany (Alexandria University, Faculty of Engineering & Egypt-Japan University of Science and Technology, Egypt); Mohamed El-Sharkawy (Purdue School of Engineering and Technology, USA)
pp. 174-177
**Digital Tuner Implementation Using FM Tuner for DRM Plus Receivers**
Seong-Jun Kim (Korea Electronics Technology Institute, Korea); Kyung Won Park (Korea Electronics Technology Institute, Korea); Kyung-Taek Lee (Korea Electronics Technology Institute, Korea); Hyung-Jin Choi (SungKyunKwan University, Korea)
pp. 178-179

**A 13.56 Mbps PSK Receiver for Very High Data Rate 13.56MHz Smart Card and NFC Applications**
Ghiath Al-Kadi (NXP Semiconductors, The Netherlands); Remco van de Beek (NXP Semiconductors, The Netherlands); Massimo Ciacci (NXP Semiconductors, The Netherlands); Peter Kompan (NXP Semiconductors, Austria); Michael Stark (NXP Semiconductors & NXP Semiconductors, Austria)
pp. 180-182

**Implementation of the Chien Search Algorithm on Application Specific Instruction Set Processor**
Hyunseok Lee (Kwangwoon University, Korea); Young Seok Lee (Kwangwoon Univ, Korea); Ho Yang (Samsung Advanced Institute of Technology, Korea)
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**T08-S01: Human Computer Interaction**

New findings in human computer interaction

**Magic Mirror Table with Social-Emotion Awareness for the Smart Home**
Yu Yuan-Chih (National Taipei University of Technology; Chinese Culture University, Taiwan); Shingchern You (National Taipei University of Technology, Taiwan); Dwen-Ren Tsai (Chinese Culture University, Taiwan)
pp. 185-186

**Seamless Windowing for a Future CE Device Running Multiple Operating Systems**
Bokdeuk Jeong (Samsung, Korea); Sung-Min Lee (Samsung Electronics, Korea)
pp. 187-190

**User Behavior Analysis in Social TV Systems**
Narichika Hamaguchi (Japan Broadcasting Corporation, Japan); Masaru Miyazaki (NHK Science and Technical Research Laboratories, Japan); Satoshi Nishimura (Japan Broadcasting Corporation, Japan); Hiroshi Fujiwara (Japan Broadcasting Corporation (NHK), Japan)
pp. 191-192

**High-precision 6-DOF Motion Tracking Architecture with Compact Low-Cost Sensors for 3D Manipulation**
Hyong-Euk Lee (Advanced Media Lab, Samsung Advanced Institute of Technology & Samsung Electronics, Korea); Sanghyun Kim (Advanced Media Lab., Samsung Advanced Institute of Technology, Korea); Changkyu Choi (Samsung Electronics, Korea); Won-Chul Bang (Samsung Advanced Institute...
T12-H01: A New Gesture-Controlled Integrated Multi-User Multitouch Display, Dr. Ilmonen
Hallway Session, Thomas Lepich

Development of a Team-Based Multiplayer Game Using a Multitouch Display
Thomas D. Lepich (University of Wuppertal, Germany)

TUT-4: IPv6
Presenter: John Brzozowski, Comcast; Richard Jimmerson, Director, DO Hub

K4: Keynote: 30 Years Consumer Electronics Conference/Panel Chair: Stu Lipoff

T01-S13: Video Distribution 2 - Surveillance and Video Architecture

Adaptive Background Generation for Automatic Detection of Initial Object Region in Multiple Color-Filter Aperture Camera-Based Surveillance System
Junghyun Lee (University of Chung-Ang, Korea); Seungwon Lee (Chung-Ang University, Korea); Inho Paek (Nextchip co, Korea); Monson Hayes (Georgia Institute of Technology, USA); Joonki Paik (Chung-Ang University, Korea)
pp. 195-196

Moving Object Segmentation Using Motion Orientation Histogram in Adaptively Partitioned Blocks for Consumer Surveillance System
Seungwon Lee (Chung-Ang University, Korea); Junghyun Lee (University of Chung-Ang, Korea); Ewoo Chon (Nextchip Co, Korea); Monson Hayes (Georgia Institute of Technology, USA); Joonki Paik (Chung-Ang University, Korea)
pp. 197-198

Algorithm and Architecture Design of Sorting-based Motion Estimation Algorithm for Wireless Video Applications
Yeong-Kang Lai (National Chung Hsing University, Taiwan); Yen-Fang Lai (National Chung Hsing University, Taiwan); Yu-Fan Lai (National Chung Hsing University, Taiwan)
pp. 199-200

Immersive Panorama TV Service System
Dongmahn Seo (Korea Institute of Science and Technology, Korea); Suhyun Kim (Korea Institute of Science and Technology, Korea); JaeWook Yoo (NBP, Korea); Hogun Park (Korea Institute of Science and Technology, Korea); Heedong Ko (Korea Institute of Science and Technology, Korea)
pp. 201-202
## T07-S02: Antennas and Channel Properties

**Video Streaming Exploiting Multiple-Antenna Techniques of WirelessMAN-Advanced Systems**  
Jeongsik Yun (Yonsei University, Wonju, Korea); Sanghyun Bak (Yonsei University, Wonju, Korea); Nulibyul Kim (Yonsei University, Korea); Kwanghoon Choi (Yonsei University, Wonju, Korea); Jaekwon Kim (Yonsei University Wonju, Korea)  
pp. 203-204

**Spectrum Usage Efficiency of Coordinated Multi-Point Transmission in Mobile Satellite Communications**  
Hee Wook Kim (Electronics and Telecommunications Research Institute, Korea)  
pp. 205-206

**Channel Estimation with Pilot Signal Design for Terrestrial UDTV Using MISO Technology**  
Do Hyun Park (Kyungpook National University, Korea); Eun Su Kang (Kyungpook national university, Korea); Bong Gyun Jo (School of Electronics Engineering, Kyungpook National University, Korea); Sang-Il Park (Korea Communications Commission, Korea); Dong Seog Han (Kyungpook National University, Korea)  
pp. 207-208

**A Performance Enhancement for 60 GHz Wireless Indoor Applications**  
Xiaoyi Zhu (University of Bristol, United Kingdom); Angela Doufexi (University of Bristol, United Kingdom); Taskin Kocak (Bahcesehir University, Turkey)  
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**Destination Cooperation in Interference Channels**  
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Presenter: Seong Hak Moon, LG.

**K7: Keynote: Product Safety of CE Devices, Thomas Lanzisero, P.E., Underwriters Laboratories**

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Kyoung-Ju Noh (ETRI, Korea)

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Hyeong-Joon Kwon (Sungkyunkwan University & School of Information and Communication Engineering, Korea); Kwang-Seok Hong (Sungkyunkwan University, Korea)

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Ziji Ma (Nara Institute of Science and Technology & Hunan University, Japan); Tomonori Sato (Nara Institute of Science and Technology, Japan); Minoru Okada (Nara Institute of Science and Technology, Japan)
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Misuk Huh (Samsung Electronics, Korea); DaeYoub Kim (Samsung Electronics, Korea); Eunah Kim (Samsung Advanced Institute of Technology, Korea); Byoung-Joon BJ Lee (Samsung Advanced Institute of Technology, Korea)
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Patricia Arias (Universidad Carlos III de Madrid, Spain); Florina Almenares (Universidad Carlos III de Madrid, Spain); Rosa Sánchez (Carlos III University of Madrid, Spain); Andres Marin (University Carlos III of Madrid, Spain); Daniel Díaz-Sánchez (Universidad Carlos III de Madrid, Spain)
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Fabio Sanvido (Universidad Carlos III de Madrid, Spain); Daniel Díaz-Sánchez (Universidad Carlos III de Madrid, Spain); Rosa Sánchez (Carlos III University of Madrid, Spain); Florina Almenares (Universidad Carlos III de Madrid, Spain); Patricia Arias (Universidad Carlos III de Madrid, Spain)
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Eunah Kim (Samsung Advanced Institute of Technology, Korea); DaeYoub Kim (Samsung Electronics, Korea); Misuk Huh (Samsung Electronics, Korea); Byoung-Joon BJ Lee (Samsung Advanced Institute of Technology, Korea)
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Dmitri Jarnikov (Eindhoven University of Technology & Irdeto, The Netherlands); Egbert Westerveld (Irdeto B. V., The Netherlands); Jeroen Doumen (Irdeto B.V., The Netherlands)
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Daniel Thommes (Stuttgart Media University & University of the West of Scotland, Germany); Qi Wang (University of the West of Scotland, United Kingdom); Ansgar Gerlicher (Media University Stuttgart, Germany); Christos Grecos (University of West of Scotland, United Kingdom)
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Hin Kwong Choi (The Hong Kong Polytechnic University, Hong Kong); Hau Shing Chu (The Hong Kong Polytechnic University, Hong Kong); Henry C. B. Chan (The Hong Kong Polytechnic University, Hong Kong)
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Hyung Sun Lee (Electronics and Telecommunications Research Institute, Korea); Il-Yeon Cho (Electronics and Telecommunications Research Institute, Korea)
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Laisa C. P. Costa (University of Sao Paulo & LSI-TEC, Brazil); Irene Ficherman (LSI-TEC, Brazil); Ana Grasielle Correa (Polytechnical School of University of Sao Paulo, Brazil); Roseli Lopes (Polytechnical School of University of Sao Paulo, Brazil); Marcelo K Zuffo (University of Sao Paulo, Brazil)
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Cheng-Liang Lin (Industrial Technology Research Institute, Taiwan); Yi-Hsuan Hung (Industrial Technology Research Institute, Taiwan)
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Hyun-Tae Jeong (ETRI, Korea); Dong-Woo Lee (ETRI, Korea); Gi-Su Heo (ETRI, Korea); Lee Cheol-Hoon (Chungnam National University, Korea)
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Nguyen Hai Tung (National Taiwan University of Science and Technology, Taiwan); Jenq-Shiou Leu (National Taiwan University of Science and Technology, Taiwan)
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Priyans Murarka (BITS-Pilani, K. K. Birla Goa Campus, India); Surabhi Gujar (BITS-Pilani, K. K. Birla Goa Campus, India); Chithra Jayaraj (BITS-Pilani, K. K. Birla Goa Campus, India); Khyali Jain (BITS-Pilani, K. K. Birla Goa Campus, India); Apurva Mudgal (BITS-Pilani, K. K. Birla Goa Campus, India); Gargi Mungekar (BITS-Pilani, K. K. Birla Goa Campus, India)

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**AC/DC Converter Free LED Driver for Lightings**

Sanghyun Cha (Samsung Electro-Mechanics, Korea); Deukhee Park (Samsung Electro-Mechanics, Korea); Yuenjoong Lee (Samsung Electro-Mechanics, Korea); Changsuk Lee (Samsung Electro-Machanics Corporation, Korea); Joongho Choi (University of Seoul, Korea); Jaeshin Lee (Samsung Electro-Machanics Corporation, Korea); Hyobum Lee (Samsung Electro-Mechanics, Korea)

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Ghaida Al Zeer (University of Wuppertal, Germany); Adnan Abou Nabout (University of Wuppertal & Faculty of Electrical, Information and Media Engineering, Germany); Bernd Tibken (University of Wuppertal, Germany)

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Dongmahn Seo (Korea Institute of Science and Technology, Korea); Suhyun Kim (Korea Institute of Science and Technology, Korea); YoungTae Jo (Kangwon National University, Korea); Hogun Park (Korea Institute of Science and Technology, Korea); Heedong Ko (Korea Institute of Science and Technology, Korea)

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Yuta Kawamoto (Nagoya Institute of Technology, Japan); Shotaro Suzuki (Nagoya Institute of Technology, Japan); Yasutaka Sakuta (Nagoya Institute of Technology, Japan); Tomio Goto (Nagoya Institute of Technology, Japan); Masaru Sakurai (Nagoya Insitute of Technology, Japan)  
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