

2009 ICCE Detailed Conference Schedule

SESSION 1.1: Personal Healthcare

Date: January 12, 2009

Time: 10:30 - 12:10

Location: Room N258

Chair: Peter Corcoran, *National University of Ireland, Galway*

Co-Chair: Guido Volleberg, *Philips Consumer Lifestyle*

- 10:30 **1.1-1** LIFE PATTERN SENSOR WITH NON-INTRUSIVE APPLIANCE MONITORING
Makoto Katsukura, Masanori Nakata, Yoshiaki Itou, Noriyuki Kushiro, *Mitsubishi Electric Corp., Japan*
- 10:55 **1.1-2** AN ELECTRONIC AIDS FOR A VISUALLY IMPAIRED PERSON USING AN ULTRASONIC SENSOR
Sehyung Park, *Korea Institute of Science and Technology, South Korea*
- 11:20 **1.1-3** DESIGN OF A SOUNDING BODY FAT MANAGEMENT SYSTEM WITH REMOTE MONITORING
Yi-Ting Lee, Chi-Huang Hung, Chia-Hung Lien, *Lee-Ming institute of technology, Taiwan*
- 11:45 **1.1-4** DESIGN AND IMPLEMENTATION OF A HL7-BASED PHYSIOLOGICAL MONITORING SYSTEM FOR MOBILE CONSUMER DEVICES
Tsung-Lin Tsai, Yi-Lin Chiang, Hsu-Cheng Lin, Johnny Hsu, Shun-Chieh Lin, *Industrial Technology Research Institute, Taiwan*

SESSION 1.2: Digital Network Aspects in Video

Date: January 12, 2009

Time: 10:30 - 12:10

Location: Room N260

Chair: Johan Lukkien, *Eindhoven University of Technology*

Co-Chair: Peter H. N. deWith, *CycloMedia / Eindhoven University of Technology*

- 10:30 **1.2-1** CYCLE TIME SYNCHRONIZATION AMONG NETWORKED IEEE 1394 CLUSTERS VIA UWB OVER COAXIAL CABLE FOR HANA AND AV/C DIGITAL MULTIMEDIA NETWORKS
Sergio Guillen Servent, *Universidad Politécnic de Valencia, Spain*
- 10:50 **1.2-2** A COMBINED PACKET CLASSIFIER AND SCHEDULER TOWARDS NET-CENTRIC MULTIMEDIA PROCESSOR DESIGN
Saraju Mohanty, Dhruva Ghai, Elias Kougianos, *University of North Texas, United States*; Priyadarsan Patra, *Intel Corporation, United States*
- 11:10 **1.2-3** BANDWIDTH ESTIMATION BASED VIDEO STREAMING FOR MOBILE DEVICES OVER HSDPA NETWORK
Hyeong-Min Nam, Kyung-Seok Shin, Jae-Yun Jeong, Hye-Soo Kim, Sung-Jea Ko, *Korea university, South Korea*
- 11:30 **1.2-4** EFFICIENT SCHEME FOR TRANSPORTING IP PACKETS OVER THE ADVANCED SATELLITE BROADCASTING SYSTEM

Shuichi Aoki, Katsunori Aoki, *Japan Broadcasting Corporation (NHK), Japan*

- 11:50 **1.2-5 SHARING CONDITIONAL ACCESS MODULES THROUGH THE HOME NETWORK**
Daniel Díaz-Sánchez, *Universidad Carlos III de Madrid, Spain*; Andres Marin, *Universidad Carlos III of Madrid, Spain*; Florina Almenárez-Mendoza, Alberto Cortés-Martín, *Universidad Carlos III de Madrid, Spain*

SESSION 1.3: Optical and Order Storage Technologies

Date: January 12, 2009

Time: 10:30 - 12:10

Location: Room N262

Chair: Kei Yamashita, *Hitachi, Ltd.*

Co-Chair: Fumio Issiki, *Hitachi, Ltd.*

- 10:30 **1.3-1 A SPINDLE MOTOR SERVO USING A DISTURBANCE OBSERVER**
Takeshi Ogata, *Hitachi Ltd, Japan*; Hideki Maruyama, *Hitachi Ltd., Japan*; Koji Fujita, *Hitachi Ltd, Japan*
- 10:55 **1.3-2 WRITE STRATEGY LEARNING FOR OPTICAL DYE RECORDING**
Leehter Yao, *National Taipei University of Technology, Taiwan*
- 11:20 **1.3-3 INCREASING THE STORAGE DENSITY FOR A 4TH-GENERATION OPTICAL DISC**
Dietmar Hepper, *Thomson, Germany*
- 11:45 **1.3-4 SECURE PROCEDURES TO RECONNECT INTELLIGENT DEVICES AND RECOVER CONTENT USAGE CONTROL INFORMATION**
Tatsuya Hirai, Yukihide Inagaki, *Hitachi, Ltd., Japan*

SESSION 1.4: Video Coding for Communications

Date: January 12, 2009

Time: 10:30 - 12:10

Location: Room N264

Chair: Erwin Bellers, *NXP Semiconductors*

Co-Chair: Christian Hentschel, *University of Technology Cottbus*

- 10:30 **1.4-1 FMO BITRATE OVERHEAD REDUCING FOR HIGH DEFINITION VIDEO STREAMING OVER WIRELESS NETWORKS**
Le Thanh Ha, Hye-Soo Kim, Chun-Su Park, Jae-Yun Jeong, Sung-Jea Ko, *CMCP, South Korea*
- 10:55 **1.4-2 CONSTRAINTS ON AVC (H.264) VIDEO AND ITS TRANSMISSION FOR CABLE**
Mukta Kar, *Cable Television Laboratories, United States*; Sam Narasimhan, *Motorola, United States*
- 11:20 **1.4-3 BANDWIDTH REDUCED H.264/AVC HARDWARE DESIGN FOR HIGH DEFINITION VIDEO ENCODING**
Chan-Sik Park, *Digital Media R&D center, Samsung electronics company, South Korea*
- 11:45 **1.4-4 SELECTIVE INTER-LAYER RESIDUAL PREDICTION FOR SVC-**

BASED MOBILE DEVICES

Seung-Jin Baek, *Korea University, South Korea*; Chun-Su Park, Seung-Won Jung, Byoung-Kyu Dan, Sung-Jea Ko, *Korea university, South Korea*

SESSION 2.1: Personal Healthcare

Date: January 12, 2009

Time: 14:20 - 16:00

Location: Room N258

Chair: Peter Corcoran, *National University of Ireland, Galway*

Co-Chair: Guido Volleberg, Philips Consumer Lifestyle

- 14:20 **2.1-1** INTEGRATING WIRELESS SENSOR NETWORKS WITH CE DEVICES FOR HEALTH CARE ACTIVITY TRACKING IN THE HOME ENVIRONMENT
Remi Bosman, Johan Lukkien, Richard Verhoeven, *Eindhoven University of Technology, Netherlands*
- 14:45 **2.1-2** EVALUATION OF VIEWING DISTANCE VS. TV SIZE ON VISUAL FATIGUE IN A HOME VIEWING ENVIRONMENT
Kiyomi Sakamoto, Shoichi Aoyama, Shigeo Asahara, *Matsushita Electric Industrial Co., Ltd., Japan*; Kuniko Yamashita, Akira Okada, *Osaka City University, Japan*
- 15:10 **2.1-3** ENTERING INFORMATION ABOUT MEDICATION INTAKE IN STANDARD ELECTRONIC HEALTH RECORDS FROM THE NETWORKED HOME
Martin Lopez-Nores, Jose J. Pazos-Arias, Jorge Garcia-Duque, Yolanda Blanco-Fernandez, Manuel Ramos-Cabrer, *University of Vigo, Spain*
- 15:35 **2.1-4** INTEGRATION OF WIRELESS FIELDBUS AND WIRED FIELDBUS FOR HEALTH MONITORING
Reinhard Möller, *University of Wuppertal, Germany*, ; Ayman Sleman, *University of Wuppertal,*

SESSION 2.3: Audio/Video Playback and Recording

Date: January 12, 2009

Time: 14:20 - 16:20

Location: Room N262

Chair: Fumio Issiki, *Hitachi, Ltd.*

Co-Chair: Kei Yamishita, Hitachi, Ltd.

- 14:20 **2.3-1** AV APPLICATIONS FOR TV SETS EMPOWERED BY CELL BROADBAND ENGINE(TM)
Michio YAMASHITA, Ryuji SAKAI, Akira TANAKA, Kei IMADA, Yukie TAKAHASHI, Takashi IDA, Nobuyuki MATSUMOTO, Nobuhiro KATO, *TOSHIBA Corporation, Japan*
- 14:44 **2.3-2** ORCHESTRAL MEDIA: THE METHOD FOR SYNCHRONIZING SINGLE MEDIA WITH MULTIPLE DEVICES FOR UBIQUITOUS HOME MEDIA SERVICES
JaeKwan Yun, *Electronics and Telecommunications Research Institute, South Korea, South Korea*
- 15:08 **2.3-3** SOFTWARE ARCHITECTURE OF LIGHT PVR ENGINE

Goran Miljkovic, Velibor Mihic, *MicronasNIT, Yugoslavia*

15:32 **2.3-4** NEURAL NETWORK BASED SEARCH ENGINE FOR THE QUERY OF MULTIMEDIA CONTENT

Manjunath Ramachandra, *Philips, India*

15:56 **2.3-5** A FRAMEWORK FOR CALCULATING FUNDAMENTAL DVR PERFORMANCE LIMITS

Samuel Russ, *University of South Alabama, United States*; Ramesh Nallur, *Vision 3 Solutions, United States*

SESSION 2.5 - Poster 1 - Video

Date: January 12, 2009

Time: 14:20 - 16:20

Location: Room N256

P-1-1 EFFECTIVE DEMOSAICING USING SUBBAND CORRELATION

Chung-Yen SU, Gen-Hau FAN, Yi-Shien LIN, *Institute of Applied Electronics Technology, National Taiwan Normal University, Taiwan*

P-1-2 GPU-CPU MULTI-CORE FOR REAL-TIME SIGNAL PROCESSING

Saraju Mohanty, *University of North Texas, United States*

P-1-3 IMAGE QUALITY COMPARISON BETWEEN 3CCD PIXEL SHIFT TECHNOLOGY AND SINGLE-SENSOR CFA DEMOSAICKING

Jim S Jimmy Li, Sharmil Randhawa, *Flinders University, Australia*

P-1-4 A REAL-TIME MOVING OBJECT DETECTION USING WAVELET-BASED NEURAL NETWORK

JongBae Kim, *Seoul Digital University, South Korea*

P-1-5 DISTORTION IDENTIFICATION TECHNIQUE IN VIDEO STABILIZATION

yan liu, *gucas, China*; mouyan zou, *iecas, China*

P-1-6 TEXT LOCALIZATION FROM PHOTOS

mirko guarnera, giuseppe messina, *STMicroelectronics, Italy*; Edoardo Ardizzone, Leonardo agro', *University of Palermo, Italy*

P-1-7 AREA EFFICIENT AND HIGH THROUGHPUT CAVLC ENCODER FOR 1920X1080@30P H.264/AVC

Chang Su Han, *SAMSUNG ELECTRONICS CO., LTD., South Korea*; Jae Hun Lee, *SAMSUNG ELECTRONICS, South Korea*

P-1-8 REAL-TIME VIDEO QUALITY ASSESSMENT PLATFORM

Istvan Papp, Nemanja Lukic, Zoran Marceta, Nikola Teslic, *Faculty of Technical Sciences, Yugoslavia*; Markus Schu, *Micronas, Germany*

P-1-9 IMAGE FUSION ON CONSUMER ELECTRONICS

Yu-Jui Lin, Chih-Tsung Shen, Chun-Cheng Lin, Hsu-Chun Yen, *National Taiwan University, Taiwan*

P-1-10 ADAPTIVE VIDEO ENHANCEMENT USING NEURAL NETWORK
Hyun Seung Lee, *Samsung Electronics, South Korea*; Rae-Hong Park,
Sogang university, South Korea; Sung Hee Kim, *Samsung Electronics, South
Korea*

P-1-11 LOSSLESS IMAGE/VIDEO COMPRESSION WITH ADAPTIVE
PLANE SPLIT
Jun Ho Cho, Tae Gyoung Ahn, Jae Hun Lee, *Samsung Electronics, South
Korea*

P-1-12 FAST INTRA SKIP METHOD IN H.264/AVC BY USING FUZZY
LOGIC
Pei-Jun Lee, Yi-Jie Shih, *Department of Electrical Engineering, National Chi
Nan University, Taiwan*

P-1-13 A FAST INTRA MODE SKIP DECISION ALGORITHM BASED ON
ADAPTIVE MOTION VECTOR MAP
Tae-Jung Kim, Jang-Eui Hong, Jae-Won Suh, *Chungbuk National University,
South Korea*

P-1-14 CONTENT-ADAPTIVE IMAGE ENHANCEMENT, BASED ON SKY
AND GRASS SEGMENTATION
Bahman Zafarifar, Peter H.N. de With, *CycloMedia / Eindhoven University of
Technology, Netherlands*

P-1-15 FAST BLOCK MOTION ESTIMATION USING 4-LEVEL ABSOLUTE
DIFFERENCE
Chang-Won Kim, Sung-Jin Kang, Sung-Il Chien, *Kyungpook National
University, South Korea*

P-1-16 A CORRELATION BASED CONTENT AWARE SEARCH STRATEGY
FOR FAST MOTION ESTIMATION FOR H.264/AVC
Humaira Nisar, *Gwangju Institute of Science and Technology, South Korea*

P-1-17 A NOVEL 2-D DCT REALIZATION USING LOW-COST
RESIDUE/QUOTIENT TECHNIQUE
Chang-Hsin Cheng, Mu-Chang Tsai, Chun-Lung Hsu, *National Dong-Hwa
University, Taiwan*

P-1-18 ADAPTIVE AFFINE ERROR CONCEALMENT SCHEME DURING
THE H.264/AVC DECODING PROCESS
Donghyung Kim, Seyoon Jeong, Jin-Soo Choi, *Electronics &
Telecommunications Research Institute (ETRI), South Korea*

P-1-19 A FAST RATE CONTROL SCHEME FOR MULTI-BITRATE VIDEO
ENCODER
Hiromasa Yanagihara, Tomohiro Tsuji, Akio Yoneyama, *KDDI R&D
Laboratories Inc., Japan*; Masayuki Tanimoto, *Nagoya University, Japan*

P-1-20 AN EFFICIENT RATE CONTROL WITH ADAPTIVE QUANTIZATION
PARAMETER DECISION AND HEADER BITS LENGTH ESTIMATION
Se-Ho Kim, *Chungbuk National University, South Korea*; Seonki Kim, *LG
Electronics, South Korea*; Jea-Won Suh, *Chungbuk National University, South*

Korea

P-1-21 EFFECTIVE ALGORITHM FOR IMBALANCE REDUCTION IN STEREO IMAGE PAIR

Jong Su Kim, Sang Keun Lee, Tae Yong Kim, Jong Soo Choi, *Chung-Ang Univ., South Korea*

P-1-22 FAST VISUAL SALIENCY MAP EXTRACTION FROM DIGITAL VIDEO

Shilin Xu, *Huazhong Univ. of Sci. & Tech., China*; Weisi Lin, *Nanyang Technological University, Singapore*; C.-C. Jay Kuo, *University of Southern California, United States*

P-1-23 IMAGE CONTRAST ENHANCEMENT BASED ON SEGMENTATION AND TONE CURVE CONTROL FOR LCD TV

Sang-jun Kim, Min-Soo Jang, Gwi-Tae Park, *Korea University, South Korea*

P-1-24 3 D MODEL RETRIEVAL USING A DESCRIPTOR OF SLICES HISTOGRAM FROM 3D SHAPE MODELS

You-Shin Park, *Chung-Ang University, South Korea*; Yong-In Yun, *Chung-Ang university, South Korea*; Jong-Soo Choi, *Chung-Ang University, South Korea*

P-1-25 REALISTIC EXPRESSION MAPPING ROBUST TO VARIOUS LIGHTING CONDITIONS

Jeong Ho Lee, *Hanyang University, South Korea*; Ki Tae Park, *Samsung Electronics Co. Ltd., South Korea*; Young Shik Moon, *Hanyang University, South Korea*

P-1-26 AUTHENTICATION AND RECOVERY OF DIGITAL IMAGES: POTENTIAL APPLICATION IN VIDEO SURVEILLANCE AND REMOTE SENSING

Rafiullah Chamlawi, *Pakistan Institute of Engineering and Applied Sciences, Nilore-45650, Islamabad, Pakistan, Pakistan*; Chang-Tsun Li, *University of Warwick, UK, United Kingdom*; Asifullah Khan, *Gwangju Institute of Science and Technology, 1 Oryong-Dong, Buk-Gu, Gwangju 500-712, Republic of Kor, South Korea*

P-1-27 A 3D SPIHT LOW-MEMORY ENCODING APPROACH FOR VIDEO COMPRESSION

Shang-Hsiu Tseng, *Penn State Harrisburg, United States*; Aldo W. Morales, *Penn State University-Harrisburg, United States*

P-1-28 IMAGE RETRIEVAL USING LOCAL TEXTURE DESCRIPTOR FOR CE APPLICATIONS

Ki Tae Park, *Samsung Electronics, Co. Ltd., South Korea*; Jeong Ho Lee, Young Shik Moon, *Hanyang University, South Korea*

P-1-29 A HIGH SPEED VLSI ARCHITECTURE OF FULL SEARCH VARIABLE BLOCK SIZE MOTION ESTIMATOR FOR MULTIPLE REFERENCE FRAMES

Kyeongyuk Min, *Dept. of E.E. Hanyang University, South Korea*; Jongwha Chong, *Hanyang university, South Korea*

P-1-30 A WAVELET-BASED INTRA-PREDICTION LOSSLESS IMAGE COMPRESSION SCHEME
Zicong Mai, Panos Nasiopoulos, Rabab Ward, *University of British Columbia, Canada*

P-1-31 A METHOD FOR HALO ARTIFACT REDUCTION IN MEMC
Xu Dong, *PowerLayer Microsystems,*

SESSION 3.1: Human Computer Interaction

Date: January 12, 2009

Time: 16:20 - 18:00

Location: Room N258

Chair: Reinhard Moeller, *University of Wuppertal*

Co-Chair: George R Borden, Logitech, Inc

16:20 **3.1-1** AN INTELLIGENT WHEELCHAIR TO ENABEL MOBILITY OF SEVERELY DISABLED AND ELDER PEOPLE
Jin Sun Ju, *konkuk university seoul south Korea, South Korea*; Eunjeong Ko, Eun Yi Kim, *Konkuk University at south Korea, South Korea*; se hyun Park, *Daegu University at south Korea, South Korea*

16:40 **3.1-2** TOWARDS AUTOMATIC PERSONALIZATION OF DEVICE CONTROLS
Olufisayo Omojokun, Charles Isbell, *Georgia Institute of Technology, United States*; Prasun Dewan, *University of North Carolina at Chapel Hill, United States*

17:00 **3.1-3** INTUITIVE APPLIANCE CONTROL SYSTEM WITH ID ACQUISITION
Yoshio Nakadai, Toshiharu Morizumi, Ushio Shibusawa, Youichi Takashima, Masanobu Abe, *NTT Cyber Solutions Laboratories, Japan*

17:20 **3.1-4** FOOT MOTION TRACKING FOR MOTION CAPTURE FROM STEREO CAMERAS
Da-un Jung, *Chunh-Ang University, South Korea*; Yong-In Yun, Jong-Soo Choi, *Chung-Ang University, South Korea*

17:40 **3.1-5** INTEGRATION OF WEB 2.0 WITH AUTOMOTIVE USER INTERFACES VIA NOMADIC DEVICES
Felipe Gil-Castiñeira, Javier González-Castaño, Enrique Costa-Montenegro, *University of Vigo, Spain*

SESSION 3.2: Video Distribution Systems

Date: January 12, 2009

Time: 16:20 - 18:00

Location: Room N260

Chair: Peter H. N. deWith, CycloMedia / Eindhoven University of Technology

Co-Chair: Johan Lukkien, Eindhoven University of Technology

16:20 **3.2-1** THE IMPLEMENTATION OF VIDEO-SEGMENTATION-ACCELERATED VCR SUPPORT FOR P2P VOD SYSTEMS WITH NETWORK CODING
xin wang, *fudan university, China*

- 16:40 **3.2-2 VISUALISE: ENHANCING SPECTATOR EXPERIENCE**
 Pierre Ferre, Paul Hill, David Halls, *University of Bristol, United Kingdom*;
 James Chung-How, *ProVision Communications, United Kingdom*; Andrew
 Nix, David Bull, *University of Bristol, United Kingdom*
- 17:00 **3.2-3 WYNER-ZIV TO H.264 VIDEO TRANSCODER FOR MOBILE
 TELEPHONY**
 JOSE LUIS MARTINEZ, GERARDO FERNANDEZ-ESCRIBANO,
UNIVERSIDAD DE CASTILLA-LA MANCHA, Spain; HARI KALVA, *FLORIDA
 ATLANTIC UNIVESITY, Spain*; ANTONIO GARRIDO, *UNIVERSIDAD DE
 CASTILLA-LA MANCHA, Spain*
- 17:20 **3.2-4 SONICSTREAM: AN IMPLEMENTATION OF A LIVE P2P MEDIA
 STREAMING SYSTEM WITH IMPROVED PLAYBACK LAG**
 xin wang, *fudan university, China*
- 17:40 **3.2-5 AN EXTENSION OF J.83 ANNEX B TRANSMISSION SYSTEMS FOR
 ULTRA-HIGH DEFINITION (UD) TELEVISION BROADCASTING**
 Chang Yeon Cho, *Konkuk University, South Korea*; Jun Heo, *Korea
 University, South Korea*; Joon Tae Kim, *Konkuk University, South Korea*

SESSION 3.3: Camera Technologies

Date: January 12, 2009

Time: 16:20 - 18:00

Location: Room N262

Chair: Takuya Imaide, *Hitachi Ltd.*

Co-Chair: Haruhiko Murata, *SANYO Electric Co., Ltd.*

- 16:20 **3.3-1 ILLUMINATION COMPENSATION USING RETINEX AND MEAN
 SHIFT – BASED COLOR SEGMENTATION**
 Heechul Han, *Samsung Electronics and Yonsei University, South Korea*;
 Kwanghoon Sohn, *Yonsei University, South Korea*
- 16:45 **3.3-2 A NEW AUTO EXPOSURE SYSTEM TO DETECT HIGH DYNAMIC
 RANGE CONDITIONS USING CMOS TECHNOLOGY**
 Quoc Kien Vuong, Se-Hwan Yun, Suki Kim, *Korea University - ULSI Lab,
 South Korea*
- 17:10 **3.3-3 AN IMAGE SIGNAL PROCESSOR FOR ULTRA SMALL HD VIDEO
 SENSOR WITH 3A IN CAMERA PHONES**
 Wonwoo Jang, *Dong-A University, South Korea*; Boodong Kwak, Joohyun
 Kim, *SAMSUNG Electro-Mechanics Co. Ltd, South Korea*; Bongsoon Kang,
Dong-A University, South Korea
- 17:35 **3.3-4 HIDING DEPTH MAP OF AN OBJECT IN ITS 2D IMAGE:
 REVERSIBLE WATERMARKING FOR 3D CAMERAS**
 Asifullah Khan, *GIST, South Korea*; Muhammad Tariq Mahmood, *Gwangju
 Institute of Science and Technology, South Korea*; Asad Ali, *National
 Engineering and Scientific Commission (NESCOM), Pakistan*; Imran Usman,
Pakistan Institute of Engineering and Applied Sciences, Pakistan; Tae-Sun
 Choi, *Gwangju Institute of Science and Technology, South Korea*

SESSION 3.4: Video Coding

Date: January 12, 2009

Time: 16:20 - 18:00

Location: Room N264

Chair: E. B. (Erwin) Bellers , *NXP Semiconductors*

Co-Chair: Christian Hentschel, *University of Technology Cottbus*

- 16:20 **3.4-1** LOW-COMPLEXITY INTRA-PREDICTION FOR H.264/AVC USING PSEUDO LOCAL DECODED IMAGE
Katsuyuki Nakamura, Shohei Saito, Toru Yokoyama, *Hitachi, Ltd., Japan*;
Seiji Mochizuki, Tetsuya Shibayama, Kenichi Iwata, *Renesas Technology Corp., Japan*
- 16:40 **3.4-2** LOSS-AWARE RATE-DISTORTION OPTIMIZATION FOR REDUNDANT PICTURE ALLOCATION IN H.264AVC
Jinho Lee, *UST, ETRI, South Korea*
- 17:00 **3.4-3** EFFICIENT IMPLEMENTATION OF ADAPTIVE INTERPOLATION FILTERS FOR LOW COMPLEXITY VIDEO CODING
Kemal Ugur, *Nokia, Finland*; Dmytro Rusanovskyy, *Tampere University of Technology, Finland*; Antti Hallapuro, Jani Lainema, *Nokia, Finland*; Moncef Gabbouj, *Tampere University of Technology, Finland*
- 17:20 **3.4-4** IMPROVED MACHINE LEARNING TECHNIQUES FOR LOW COMPLEXITY MPEG-2 TO H.264 TRANSCODING USING OPTIMIZED CODECS
Chris Holder, *Florida Atlantic University, United States*; Tao Pin, *Tsinghua University, China*; Hari Kalva, *Florida Atlantic University, United States*
- 17:40 **3.4-5** NEW FAST FULL SEARCH ALGORITHMS USING DCT COEFFICIENTS
Hyuk Lee, Soonjong Jin, Jechang Jeong, *Hanyang University, South Korea*

SESSION 4.1: Networking Platforms and Frameworks

Date: January 13, 2009

Time: 08:15 - 09:55

Location: Room N258

Chair: Johan Lukkien, *Eindhoven University of Technology*

Co-Chair: Bernard Fong, *Hong Kong Polytechnic University*

- 08:15 **4.1-1** DYNAMIC MASHUP PLATFORM FOR MOBILE WEB APPLICATIONS
Seongho Cho, Hyoungshick Kim, Dongshin Jung, Hoyeon Park, *Samsung Electronics Co., Ltd., South Korea*
- 08:40 **4.1-2** MOMPT TOOLS: ENABLING HTPCS ACCESS USING UPNP AND WEB SERVICES
Lorena Maia, Danilo Santos, Angelo Perkusich, Hyggo Almeida, *Federal University of Campina Grande, Brazil*
- 09:05 **4.1-3** A FRAMEWORK FOR ADVANCED HOME SERVICE DESIGN AND MANAGEMENT
Felix Jesus Villanueva, David Villa, María José Santofimia, Francisco Moya, Juan Carlos Lopez, *University of Castilla-La Mancha, Spain*

09:30 **4.1-4** A CONFIGURATION MANAGEMENT SYSTEM FOR MULTI-HOP ZIGBEE NETWORK
Seong Hoon Kim, Jeong Seok Kang, Hong Seong Park, *Kangwon national university, South Korea*

SESSION 4.2: Synchronization and Equalization

Date: January 13, 2009

Time: 08:15 - 09:55

Location: Room N260

Chair: Uwe E. Kraus, *University of Wuppertal*

Co-Chair: Simon Sherratt, *The University of Reading*

08:15 **4.2-1** DESIGN OF A HIGH-SPEED BLOCK INTERLEAVING/DEINTERLEAVING ARCHITECTURE FOR WIRELESS COMMUNICATION APPLICATIONS
Chu Yu, *National ILan University, Taiwan*; Mao-Hsu Yen, *National Taiwan Ocean University, Taiwan*; Pao-Ann Hsiung, *National Chung Cheng University, Taiwan*; Sao-Jie Chen, *National Taiwan University, Taiwan*

08:35 **4.2-2** PILOT-BASED NON-ADAPTIVE EQUALIZERS USING AN ARRAY ANTENNA FOR DTV RECEIVER SYSTEM
Jaehyun Park, Joohwan Chun, *Korea Advanced Institute of Science and Technology, South Korea*

08:55 **4.2-3** FREQUENCY DOMAIN EQUALIZATION OF SC-FDMA SIGNAL WITHOUT ANY REFERENCE SYMBOLS
sosthène yameogo, Jacques Palicot, *IETR/SUPELEC Lab, France*

09:15 **4.2-4** ROBUST VIDEO BROADCASTING OVER 802.11A/G IN TIME-CORRELATED FADING CHANNELS
Victoria Sgardoni, Pierre Ferre, Andrew Nix, David Bull, *University of Bristol, United Kingdom*

09:35 **4.2-5** AN EQUALIZATION DIGITAL ON-CHANNEL REPEATER FOR T-DMB SYSTEM IN TIME-VARYING CHANNELS
Jin-Yong Choi, Min-Sung Hur, *Yonsei University, South Korea*; Young-Woo Suh, *Korea Broadcasting System, South Korea*; Jong-Soo Seo, *Yonsei University, South Korea*

SESSION 4.3: Image Stabilization for Still and Video Cameras

Date: January 13, 2009

Time: 08:15 - 09:55

Location: Room N262

Chair: Haruhiko Murata, *SANYO Electric Co., Ltd.*

Co-Chair: Takuya Imaide, *Hitachi Ltd.*

08:15 **4.3-1** AN IMAGE STABILIZATION TECHNOLOGY FOR DIGITAL STILL CAMERA BASED ON BLIND DECONVOLUTION
Haruo Hatanaka, Simpei Fukumoto, Hiroshi Kano, Haruhiko Murata, *SANYO Electric Co., Ltd., Japan*

08:40 **4.3-2** CAMERA SHAKING EFFECTS REDUCTION BY MEANS OF STILL SEQUENCE STABILIZATION AND SPATIO-TEMPORAL FILTERING

giuseppe spampinato, alfo castorina, arcangelo bruna, alessandro capra,
STMicroelectronics, Italy

09:05 **4.3-3** IMAGE STABILIZATION ALGORITHM FOR VIDEO WITH LARGE
IMAGE FLUCTUATION
Hitoshi Yamada, *Panasonic, Japan*

09:30 **4.3-4** ROBUST DIGITAL IMAGE STABILIZATION USING FEATURE
TRACKING
Chuntao Wang, Jin-Hyung Kim, Keun-Yung Byun, Sung-Jea Ko, *Korea Univ.,
South Korea*

SESSION 4.4: Quality and Sharpness

Date: January 13, 2009

Time: 08:15 - 09:55

Location: Room N264

Chair: Christian Hentschel, *University of Technology Cottbus*

Co-Chair: Erwin Bellers, *NXP Semiconductors*

08:15 **4.4-1** STRUCTURAL INFORMATION-BASED IMAGE QUALITY
ASSESSMENT USING LU FACTORIZATION
Ho-Sung Han, Dong-O Kim, Rae-Hong Park, *Sogang University, South Korea*

08:35 **4.4-2** ADAPTIVE DEMOSAICING ALGORITHM USING CHARACTERISTICS
OF COLOR FILTER ARRAY PATTERN
Rae-Hong Park, *Sogang University, South Korea*; Ji Won Lee, *Sogang Univ.,
South Korea*

08:55 **4.4-3** DEPTH MAP POST-PROCESSING FOR 3D-TV
Om Prakash Gangwal, *NXP semiconductors, Netherlands*; Robert-Paul
Berretty, *Philips Research, Netherlands*

09:15 **4.4-4** IMAGE QUALITY ENHANCEMENT METHOD BASED ON SCENE
CATEGORY CLASSIFICATION AND ITS EVALUATION
Masato Tsukada, Chisato Funayama, Masato Toda, Ryota Oami, *NEC
Corporation, Japan*; Masatoshi Arai, *NEC Informatec Systems, Ltd., Japan*;
Akira Inoue, *NEC Corporation, Japan*

09:35 **4.4-5** GLOBAL AND LOCAL TRANSFORMATION FUNCTION MIXTURE
FOR IMAGE CONTRAST ENHANCEMENT
Md. Hasanul Kabir, M. Abdullah-Al- Wadud, Oksam Chae, *Kyung Hee
University, South Korea*

SESSION 5.1: Audio Signal Processing

Date: January 13, 2009

Time: 10:10 - 11:50

Location: Room N258

Chair: Christian Schuldt, *Limes Technology*

Co-Chair: Rong Hu, *Logitech*

10:10 **5.1-1** A VERSATILE ECHO-AND-NOISE CONTROL SUITE FOR ADVERSE
ENVIRONMENTS WITH A USER-CONTROL CAPABILITY
Akihiko Sugiyama, *NEC Corporation, Japan*

- 10:30 **5.1-2** 20-KHZ FREQUENCY-RANGE ACOUSTIC ECHO CANCELLER FOR HIGH-QUALITY TV CONFERENCING
Masahiro Fukui, Akira Nakagawa, Suehiro Shimauchi, Yoichi Haneda, *NTT Cyber Space Laboratories, Japan*; Akitoshi Kataoka, *Ryukoku University, Japan*
- 10:50 **5.1-3** HANDS-FREE VOICE COMMUNICATION PLATFORM INTEGRATED WITH TV
Istvan Papp, Zoran Saric, Sasa Vukosavljev, *Faculty of Technical Sciences, Yugoslavia*; Nikola Teslic, Miodrag Temerinac, *MicronasNIT, Yugoslavia*
- 11:10 **5.1-4** DEVELOPMENT OF AN UNDERWATER NOISE REDUCTION TECHNOLOGY
tomoki oku, *SANYO Electric Co., Ltd., Japan*
- 11:30 **5.1-5** OPTIMIZED JOINT CODING ALGORITHM FOR AUDIO STREAMING IN SHORT RANGE WIRELESS NETWORKS
Jelena Kovacevic, *University of Novi Sad, Yugoslavia*; Dragan Samardzija, *Bell Labs, Alcatel-Lucent, United States*; Miodrag Temerinac, *MicronasNIT, Novi Sad Institute of Information Technology, Yugoslavia*

SESSION 5.2: Content Analysis in Video Distribution

Date: January 13, 2009

Time: 10:10 - 11:50

Location: Room N260

Chair: Peter H.N. deWith, *CycloMedia / Eindhoven University of Technology*

Co-Chair: Johan Lukkien, *Eindhoven University of Technology*

- 10:10 **5.2-1** END-USER VIDEO-QUALITY ESTIMATION BASED ON A REDUCED-REFERENCE MODEL EMPLOYING ACTIVITY-DIFFERENCE FOR IPTV SERVICES
Toru Yamada, Yoshihiro Miyamoto, Masahiro Serizawa, *NEC, Japan*
- 10:30 **5.2-2** EBIR: EMOTION-BASED IMAGE RETRIEVAL
Youngrae Kim, Yunhee Shin, So-jung Kim, Eun Yi Kim, *Konkuk, South Korea*
- 10:50 **5.2-3** A NOVEL FEATURE DESCRIPTOR FOR IMAGE RETRIEVAL
Ki-Hyun Kang, Yong-In Yun, Jong-Soo Choi, *Chung-Ang University, South Korea*
- 11:10 **5.2-4** WHAT'S ON TV TONIGHT? AN EFFICIENT AND EFFECTIVE PERSONALIZED RECOMMENDER SYSTEM OF TV PROGRAMS
Ana Belén Barragáns Martínez, José J. Pazos Arias, Ana Fernández Vilas, Jorge García Duque, Martín López Nores, *University of Vigo, Spain*
- 11:30 **5.2-5** A MUSIC RECOMMENDATION SYSTEM IN MOBILE ENVIRONMENT
Won-Ik Park, *Chungnam National University, South Korea*

SESSION 5.5 - Poster 2

Date: January 13, 2009

Time: 09:55 - 11:50

Location: Room N256

P-2-1 DESIGN AND IMPLEMENTATION OF 300MBPS 2X3 MIMO-OFDM TRANSCEIVER FOR IEEE 802.11N WIRELESS LANS

Il-Gu Lee, *ETRI, South Korea*

P-2-2 NEW COST-EFFECTIVE DRIVING CIRCUIT FOR PLASMA-TV

Jae Kwang Lim, Heung-Sik Tae, Dong-Ho Lee, *Kyungpook National University, South Korea*; Su Jin Kim, Kazuhiro Ito, Jung Pil Park, Nam Sung Jung, *Samsung SDI, South Korea*

P-2-3 COOOL: A LIFE LOG COLLECTOR INTEGRATED WITH A REMOTE-CONTROLLER FOR ENABLING USER CENTRIC SERVICES

Yuji Morinishi, Atsuhiko Maeda, Ryosuke Aoki, Masakatsu Aoki, Hirohito Inagaki, *NTT Cyber Solutions Laboratories, Japan*

P-2-4 IEEE 802.15.4A RECEIVER FOR RANGING AND LOW-RATE COMMUNICATION

Mi-Kyung Oh, Jae-Young Kim, *ETRI, South Korea*

P-2-5 A NEW DESIGN OF OFDM FOR ULTRA-WIDEBAND SYSTEMS

Eun Chang CHOI, Jae Doo HUH, *Electronics and Telecommunications Research Institute, South Korea*; Seog Geun KANG, *Gyeongsang National University, South Korea*

P-2-6 MULTISTAGE WAVEFORM CODING FOR VOICE COMMUNICATION USING ZIGBEE

Zhenxing CHEN, Seog Geun KANG, *Gyeongsang National University, South Korea*; Eun Chang CHOI, Jae Doo HUH, *Electronics and Telecommunications Research Institute, South Korea*

P-2-7 LOW-POWER ARCHITECTURE FOR A 6-BT 1.6GS/S FLASH A/D CONVERTER

JINWOO KIM, *Korea University, South Korea*

P-2-8 ADAPTIVE STRETCHED-OUT CODING BASED ON CUMULATIVE HISTOGRAM ANALYSIS FOR REDUCTION OF GSR ERROR AND DFC IN PLASMA TV

Sung-Jin Kang, Sang-Chul Kim, Sung-Il Chien, Heung-Sik Tae, *Kyungpook National Univ., South Korea*

P-2-9 AN MPEG-BASED WIDGET SYSTEM FOR CE AND MOBILE DEVICES

Cyril Concolato, Jean Le Feuvre, *TELECOM ParisTech, France*; KyungMo Park, *SAMSUNG Electronics Co., Ltd, South Korea*

P-2-10 BLIND CHANNEL ESTIMATION FOR HIERARCHICAL MODULATION IN OFDM SYSTEMS

Min Cheol Jeon, Jun-Sil Chang, Bo-Seok Seo, *Chungbuk National University, South Korea*

P-2-11 EFFICIENT IPV6 NEIGHBOR DISCOVERY SCHEME FOR WIRELESS LAN MESH NETWORKS

Jihoon Lee, *Samsung Electronics, South Korea*

P-2-12 DESIGN AND IMPLEMENTATION OF LONG-RANGE RFID READER FOR SENSOR TAG SYSTEM

Dongbeom Shin, *ETRI, South Korea*

P-2-13 ADAPTIVE OPEN MOBILE LEARNING DEVICE FOR THE UNDERSERVED

Choong Bum Park, Hoon Choi, *Chungnam National University, South Korea*;
Paul Kim, *Stanford University School of Education, United States*

P-2-14 PERFORMANCE EVALUATION OF UNIFORM DISTRIBUTION R-SIMA ALGORITHM FOR EFFICIENT RESOURCE ALLOCATION IN WIRELESS NETWORK

Jung-Sik Sung, Seung Ho Back, Jaedoo Huh, *ETRI, South Korea*

P-2-15 DYNAMIC SELF RECONFIGURABLE MOBILE PLATFORM FOR MULTIMODAL LIFE LOG SIGNAL

Changseok Bae, *ETRI, South Korea*

P-2-16 ACTUAL REMOTE CONTROL: A WEARABLE REMOTE CONTROL ON WRIST

Dong-woo Lee, Jeong-mook Lim, John Sunwoo, Bae-sun Kim, *ETRI, South Korea*;
Cheol-hoon Lee, *Chungnam National University, South Korea*

P-2-17 AUDIO/VIDEO PROCESSING AND FASTER TRANSFER TIME FOR T-DMB HANDHELD

Taikyeong Jeong, *Myongji University, South Korea*

P-2-18 PERFORMANCE ANALYSIS OF NETWORK CODING WITH RAPTOR CODES FOR MULTIMEDIA BROADCAST SERVICES

kwangseok Noh, *korea Univ., South Korea*; HyunDoo Chae, *korea univ., South Korea*;
Wonjin Sung, *sogang univ., South Korea*; Jun Heo, *korea univ., South Korea*

P-2-19 CLEVEREMOTE - ADAPTIVE ENVIRONMENTS USING BLUETOOTH/INFRARED TRANSCIEVERS

Mateus A. M. Lima, Gutemberg G. Santos Jr., Marcos R. A. Morais, Kyller C. GORGÔNIO, Angelo PERKUSICH, *Federal University of Campina Grande, Brazil*

P-2-20 CONTEXT DRIVEN WEB APPLICATIONS FOR NETWORKED DTV

Fernando Matsubara, Takehiko Hanada, Shigeru Imai, Shin Miura, Shinji Akatsu, *Mitsubishi Electric Corporation, Japan*

SESSION 6.1: Frame Rate Conversion

Date: January 13, 2009

Time: 14:20 - 16:00

Location: Room N258

Chair: Christian Hentschel, *University of Technology Cottbus*

Co-Chair: E. B. (Erwin) Bellers, NXP Semiconductors

14:20 **6.1-1 EFFICIENT TRUE MOTION ESTIMATION USING INTEGRAL FRAME**

ATTRIBUTES

Nico Cordes, *NXP Semiconductors, Netherlands*

- 14:40 **6.1-2** LOW-COMPLEXITY OCCLUSION HANDLING FOR MOTION-COMPENSATED FRAME RATE UP-CONVERSION
Wei Hong, *Texas Instruments, United States*
- 15:00 **6.1-3** DE-INTERLACING USING PRIORITY PROCESSING FOR GUARANTEED REAL TIME PERFORMANCE WITH LIMITED PROCESSING RESOURCES
Stefan Schiemenz, Christian Hentschel, *Brandenburg University of Technology Cottbus, Germany*
- 15:20 **6.1-4** ROBUST VIDEO FRAME RATE UP-CONVERSION (FRUC) TECHNIQUES
Tanaphol Thaipanich, Ping-hao Wu, C.-C. Jay Kuo, *Ming Hsieh Department of Electrical Engineering, University of Southern California, United States*
- 15:40 **6.1-5** FAST FRAME RATE UP-CONVERSION USING MOTION VECTOR VERIFICATION FOR LCD DEVICES
Jong-Woo Han, Tae-Shick Wang, Jun-Hyung Kim, Min-Cheol Hwang, Sung-Jea Ko, *Korea University, South Korea*

SESSION 6.2: Special Session: Reconfigurable Consumer Electronics

Date: January 13, 2009

Time: 14:20 - 16:00

Location: Room N260

Chair: Peter Corcoran, *National University of Ireland, Galway*

Co-Chair: Simon Sherratt, *The University of Reading*

- 14:30 **6.2-1** METHOD FOR FAST COMPRESSION OF PROGRAM CODES FOR OTA UPDATION IN CONSUMER DEVICES
Ryozo Kiyohara, Satoshi Mii, *Mitsubishi Electric Corporation, Japan*; Mitsuhiro Matsumoto, Masayuki Numao, Satoshi Kurihara, *Osaka University, Japan*
- 14:55 **6.2-2** FPGA IMPLEMENTATION OF A RECONFIGURABLE FFT FOR SOFTWARE RADIO MULTISTANDARD SYSTEMS
Yves LOUET, *SUPELEC, France*
- 15:20 **6.2-3** AN EFFICIENT HARDWARE RECONFIGURABLE AUDIO DATA ACQUISITION, STORING AND MONITORING SYSTEM
Mohammed Abdallah, *Tennessee Technological University, United States*; Omar Ekeelany, Ali Alouani, *TTU, United States*
- 15:45 **6.2-4** AN H.264 VIDEO DECODER BASED ON A DM6437 DSP
Fernando Pescador, Gonzalo Maturana, *Universidad Politécnica de Madrid, Spain*; Matias J. Garrido, Eduardo Juarez, Cesar Sanz, *Universidad Politécnica de Madrid, Spain*

SESSION 6.3: Digital Receivers I

Date: January 13, 2009

Time: 14:20 - 16:00

Location: Room N260

Chair: Paul Snopko, *Techwell, Inc.*

Co-Chair: Uwe E. Kraus, University of Wuppertal

- 14:20 **6.3-1** IMPLEMENTATION OF A GLOBAL MOBILE TV SYSTEM
Yong-Suk Park, Se-Ho Park, Kyung-Taek Lee, Jong-Ho Paik, *Korea Electronics Technology Institute, South Korea*; Jong-Moon Chung, *Yonsei University, South Korea*
- 14:40 **6.3-2** A SILICON RF TUNER FOR MULTI-STANDARD DIGITAL TERRESTRIAL RECEPTION
Cristian Marius Albina, *GME mbH, Germany*; Mohit Berry, Michael Flath, Herbert Stockinger, *Infineon Technologies AG, Germany*
- 15:00 **6.3-3** OFDM RECEIVERS USING OVERSAMPLING WITH RATIONAL SAMPLING RATIOS
young-su lee, bo-seok seo, *chungbuk national university, South Korea*
- 15:20 **6.3-4** EVALUATION OF DIVERSITY COMBINING SYSTEMS FOR MOBILE RECEPTION　IN DIGITAL TERRESTRIAL TELEVISION BROADCASTING
Takuya Kojiya, *SANYO Electric Co., Ltd., Japan*
- 15:40 **6.3-5** A DIVERSITY SYSTEM FOR MOBILE RECEPTION OF DIGITAL TERRESTRIAL TELEVISION BROADCASTING
Nobufumi Ueno, *Sanyo Electric Co., Ltd., Japan*

SESSION 6.4: Content Protection

Date: January 13, 2009

Time: 14:20 - 16:00

Location: Room N264

Chair: Akiomi Kunisa, *SANYO Technology*

Co-Chair: Scott Linfoot, De Montfort University

- 14:20 **6.4-1** WEAKLY-TETHERED MODEL USING STANDARDIZED CONTENT PROTECTION
Thierry Dagaëff, *Nagravision, Switzerland*
- 14:45 **6.4-2** IMPROVED AACs FRAMEWORK FOR PRIVATE DIGITAL CONTENTS
DaeYoub Kim, Misuk Huh, *Samsung Electronics, South Korea*
- 15:10 **6.4-3** A MULTI-LAYER BASED ACCESS CONTROL MODEL FOR GIS MOBILE WEB SERVICES
Jangwon Kim, *Korea University, South Korea*; Dongwon Jeong, *Kunsan University, South Korea*; Doo-Kwon Baik, *Korea University, South Korea*
- 15:35 **6.4-4** SVC/MVC CONTENT PROTECTION OVER P2P DELIVERY NETWORKS
Lara García, Laura Arnaiz, Federico Álvarez, *Universidad Politécnica de Madrid, Spain*; Theodore Zahariadis, *Synelixis, Greece*

SESSION 7.1: Image/Video Signal Processing I

Date: January 13, 2009

Time: 16:20 - 18:00

Location: Room N258

Session Chair: Sharon Peng, Harman Consumer Group

- 16:20 **7.1-1** WIPE SCENE-CHANGE DETECTOR BASED ON VISUAL RHYTHM SPECTRUM
Kwang-deok Seo, *Yonsei Univ., Other Country*; Soon-heung Jung, *ETRI, Other Country*
- 16:40 **7.1-2** AN EFFICIENT APPROACH TOWARDS HIGH DYNAMIC RANGE PROCESSING
E. B. (Erwin) Bellers, Johan Janssen, Maurice Penners, *NXP Semiconductors, United States*
- 17:00 **7.1-3** LOCAL ESTIMATION OF VIDEO COMPRESSION ARTIFACTS
Jelte Peter Vink, Gerard de Haan, *Philips Research Laboratories, Netherlands*
- 17:20 **7.1-4** VIDEO GENERATION FOR HIGH SPATIO-TEMPORAL RESOLUTION IMAGING
Taro Imagawa, *Matsushita Electric Industrial, Japan*; Takeo Azuma, Kunio Nobori, Hideto Motomura, *Matshushita Electric Industrial, Japan*
- 17:40 **7.1-5** AUTOMATIC SURVEILLANCE ANALYZER USING TRAJECTORY AND BODY-BASED MODELING
Weilun Lao, Jungong Han, Peter H.N. de With, *CycloMedia / Eindhoven University of Technology, Netherlands*

SESSION 7.2: Architectures, (Home) Control and Power Systems

Date: January 13, 2009

Time: 16:20 - 18:00

Location: Room N260

Chair: Peter Corcoran, *National University of Ireland, Galway*

Co-Chair: Guido T.G. Volleberg, Philips Consumer Lifestyle

- 16:20 **7.2-1** REMOTE-CONTROLLABLE AND ENERGY-SAVING ROOM ARCHITECTURE BASED ON ZIGBEE COMMUNICATION
Jinsoo Han, Haeryong Lee, Kwang-Roh Park, *ETRI, South Korea*
- 16:40 **7.2-2** A "TRY BEFORE YOU BUY" APPROACH FOR NETWORKED DIGITAL HOME APPLIANCES AND SERVICES
Pang-Chieh Wang, Cheng-Liang Lin, Chieh-Chuan Kung, Jhan-Hao Rao, Ting-Wei Hou, *National Cheng Kung University, Taiwan*
- 17:00 **7.2-3** DYNAMIC LOAD DISTRIBUTION FOR PERFORMANCE AND ENERGY IN MOBILE STORAGE SYSTEMS
Young-Jin Kim, *Sun Moon University, South Korea*; Jihong Kim, *Seoul National University, South Korea*
- 17:20 **7.2-4** WORKLOAD ESTIMATION FOR POWER MANAGEMENT
Saulo Luiz, Angelo Perkusich, Antonio Lima, *Federal University of Campina Grande, Brazil*

- 17:40 **7.2-5** A FAST-LOCKING PLL ARCHITECTURE FOR EFFICIENT CYCLING OF POWER-SAVING STATES IN MOBILE ELECTRONIC DEVICES
Nathaniel August, Michael Rifani, *Intel Corporation, United States*

SESSION 7.3: Digital Receivers II

Date: January 13, 2009

Time: 16:20 - 18:00

Location: Room N262

Chair: Bill Rowe, *WARowe Consultancy*

Co-Chair: Stu Lipoff, *IP Action Partners*

- 16:20 **7.3-1** DIGITAL BROADCASTING RECEIVER PLATFORM WITH FUNCTIONAL EXPANDABILITY BY USING NETWORK CONNECTED DEVICES
Akitsugu Baba, Masaru Takechi, Haruo Hoshino, Yoshiaki Shishikui, *Japan Broadcasting Corporation (NHK), Japan*
- 16:45 **7.3-2** AN EFFECTIVE FRAME DETECTION AND FFT WINDOW POINT TRACKING ALGORITHM FOR DIGITAL RADIO MONDIALE RECEIVERS
Seong-Jun Kim, Kyung-Won Park, Se-Ho Park, Ki-Won Kwon, Jong-Ho Paik, *Korea Electronics Technology Institute, South Korea*
- 17:10 **7.3-3** THE PROPOSAL FOR AUDIO DYNAMIC RANGE CONTROL OF SET-OP BOX
Kyunik Chang, TaeYong Kim, *Chung-ang University, South Korea*
- 17:35 **7.3-4** TVGUIDE2.0: APPLYING THE WEB2.0 FUNDAMENTALS DO IDTV
Rebeca Díaz Redondo, Ana Fernández Vilas, José J. Pazos Arias, Alberto Gil Solla, Manuel Ramos Cabrer, *University of Vigo, Spain*

SESSION 7.4: Special Session: Secure Programmable Systems

Date: January 13, 2009

Time: 16:20 - 18:00

Location: Room N264

Chair: Akiomi Kunisa, *SANYO Technology*

Co-Chair: Scott Linfoot, *De Montfort University*

- 16:30 **7.4-1** SOFTWARE ARCHITECTURE OF A SECURE MULTIMEDIA SYSTEM USING A MULTICORE SOC AND SOFTWARE VIRTUALIZATION
Hiroyuki Kondo, Osamu Yamamoto, Sugako Otani, *Renesas Technology Corp., Japan*; Naoto Sugai, *Mitsubishi Electric Corp., Japan*; Toru Shimizu, *Renesas Technology Corp., Japan*
- 16:52 **7.4-2** A DYNAMIC CONDITIONAL ACCESS SYSTEM BASED ON CRYPTOGRAPHIC SOFTWARE FOR THE IPTV SET-TOP BOX
Jinyoung Moon, Jungtae Kim, Jongyoul Park, Euihyun Paik, Kwangroh Park, *Electronics and Telecommunications Research Institute, South Korea*
- 17:14 **7.4-3** A PHOTO VERIFICATION TECHNIQUE USING EMBEDDED GPS DATA FOR MOUNTING IN PROGRAMMABLE PORTABLE PHONE TERMINALS
Atsushi Katayama, *Nii and NTT, Japan*; Ryo Kitahara, Harumi Kawamura,

Hideki Koike, *NTT, Japan*

- 17:36 **7.4-4 INTELLECTUAL PROPERTY PROTECTION IN SELF-RECONFIGURABLE EMBEDDED SYSTEMS**
Krzysztof Kepa, Fearghal Morgan, Krzysztof Kosciuskiewicz, *BIRC Group, Dept. of Electronic Eng., NUI Galway, Ireland*

SESSION 8.1: Image/Video Signal Processing II

Date: January 14, 2009

Time: 08:45 - 10:25

Location: Room N258

Session Chair: Sharon Peng, Harman Consumer Group

- 08:45 **8.1-1 SMART CAMERAS: 2D AFFINE MODELS FOR ROBUST PERSON RECOGNITION IN CONSUMER IMAGES**
Mircea Cristian Ionita, Peter Corcoran, Ioana Bacivarov, *NUI Galway, Ireland*
- 09:05 **8.1-2 BLOCKINESS EVALUATION FOR REDUCING BLOCKING ARTIFACTS IN COMPRESSED IMAGES**
Xu Zheng, Yawen Liu, *Beijing University of Posts and Telecommunication, China*; Guangjian Shi, *PowerLayer Microsystems(Beijing), China*
- 09:25 **8.1-3 AN BLOCK-BASED 2D-TO-3D CONVERSION SYSTEM WITH BILATERAL FILTER**
Chao-Chung Cheng, Chung-Te Li, Po-Sen Huang, Tsung-Kai Lin, Yi-Min Tsai, Liang-Gee Chen, *National Taiwan University, Taiwan*
- 09:45 **8.1-4 CORRECTION OF RADIAL DISTORTION USING A PLANAR CHECKERBOARD PATTERN AND ITS IMAGE**
Seok-Han Lee, Jong-Soo Choi, *Chung-Ang University, South Korea*
- 10:05 **8.1-5 ROBUST NOISE REDUCTION USING A HIERARCHICAL MOTION COMPENSATION IN NOISY IMAGE SEQUENCES**
Jung-Jae Oh, Yoon-Jong Kim, *Korea Polytechnic University, South Korea*; Seung-Jong Choi, Byung-Tae Choi, *DTV Lab. LG Electronics. Inc., South Korea*; Eung-Tae Kim, *Korea Polytechnic University, South Korea*

SESSION 8.2: Display Systems

Date: January 14, 2009

Time: 08:45 - 10:25

Location: Room N260

Chair: Atul Batra, *Marvell Semiconductors, Inc.*

Co-Chair: Wang Lou, *Mitsubishi Digital Electronics America, Inc*

- 08:45 **8.2-1 SPATIAL APPROXIMATION OF VOLUMETRIC IMAGES FOR THEIR SIMPLIFICATION IN TRANSMISSION AND DISPLAY**
Karuppanan Balasubramanian, Akin Cellatoglu, *European University of Lefke, Turkey*
- 09:10 **8.2-2 COLOR TUNING OPTICAL ENGINE FOR ADAPTIVE COMBINATION: HIGH BRIGHTNESS AND WIDE COLOR GAMUT**
Kazuhiro Arai, *SANYO Electric Co., Ltd., Japan*

- 09:35 **8.2-3 COMPACT PROGRAMMABLE NETWORK DISPLAY SYSTEM FOR PORTABLE PROJECTORS**
Kenji Tsunashima, Tetsuro Shida, Hideki Kawano, Toshimitsu Sato, Hideaki Kosaka, *Mitsubishi Electric, Japan*
- 10:00 **8.2-4 MULTI-VIEW RENDERER FOR AUTO-STEREOSCOPIC MOBILE DEVICES**
Laurent Pasquier, Jean Gobert, *NXP Semiconductors, France*

SESSION 8.3: Wireless Services and Networks I

Date: January 14, 2009

Time: 08:45 - 10:25

Location: Room N262

Chair: Bill Rowe, *WARowe Consultancy*

Co-Chair: Paul Snopko, *Techwell, Inc*

- 08:45 **8.3-1 INTERFERENCE-AWARE TOPOLOGY CONTROL FOR WIRELESS PERSONAL AREA NETWORKS**
Junseok Kim, Younggoo Kwon, *Konkuk University, South Korea*
- 09:05 **8.3-2 EFFICIENT LAYER-2 PROTOCOL FOR BIT-LOADING IMPLEMENTATION OVER WI-FI**
Byung-Seo Kim, *Hongik University, South Korea*; Sung Won Kim, *Yeungnam University, South Korea*
- 09:25 **8.3-3 DEVELOPMENT OF ZIGBEE MOBILE ROUTER FOR SUPPORTING NETWORK MOBILITY IN HEALTHCARE SYSTEM**
Jin Ho Kim, Byung Goo Choi, Jihyuk Heo, Choong Seon Hong, *Kyung Hee University, South Korea*
- 09:45 **8.3-4 FRAMEWORK AND ANALYSIS OF SWITCHED WIRELESS VIDEO SERVICES OVER MOBILE WIMAX NETWORK**
Seungeun Hong, *ETRI, South Korea*
- 10:05 **8.3-5 DELIVERING LIVE-ACTION TO HANDHELD DEVICES: EXPERIMENTAL RESULTS AND RECOMMENDATIONS**
George Zaggoulos, David Halls, Andrew Nix, David Bull, *Bristol University, United Kingdom*

SESSION 8.4: Automotive AV & Networking

Date: January 14, 2009

Time: 08:45 - 10:25

Location: Room N264

Chair: Guido T.G. Volleberg, *Philips Consumer Lifestyle*

Co-Chair: Peter Corcoran, *National University of Ireland, Galway*

- 08:45 **8.4-1 CAR NAVIGATION SYSTEM WITH IMAGE RECOGNITION**
kohei ito, *Pioneer, Japan*
- 09:05 **8.4-2 PROBABILISTIC DELAY MODEL OF DYNAMIC MESSAGE FRAME IN FLEXRAY PROTOCOL**
Bongjun Kim, Kiejun Park, *Ajou University, South Korea*

- 09:25 **8.4-3** PROVISION OF THE EXPRESSIVE MULTISENSORY ADAPTATION FOR HETEROGENEOUS MULTIMEDIA DEVICES IN THE UBIQUITOUS HOME
Sangwook Park, *Electronics and Telecommunications Research Institute, South Korea*; Noh-Sam Park, Jung tae Kim, *Electronics and Telecommunications Research Institute, South Korea*
- 09:45 **8.4-4** PHYSICAL LAYER DESIGN FOR ECU NODES IN FLEXRAY-BASED AUTOMOTIVE COMMUNICATION SYSTEMS
Chua-Chin Wang, Gang-Neng Sung, Ching-Lin Wang, Po-Cheng Chen, *National Sun Yat-Sen University, Taiwan*; Min-Fang Luo, Hsao-Chun Hu, *Chung-Shan Institute of Science and Technology, Taiwan*
- 10:05 **8.4-5** MULTI-STATION SCANNING STRATEGY FOR COLLECTING APPEALING RADIO CONTENT
Hong Li, *NXP Semiconductors, Netherlands*; Brice Guayrin, *ENSEIRB, Bordeaux, France*; Ralph van Dinther, *Philips Research, Netherlands*

SESSION 9.1: Image/Video Signal Processing III

Date: January 14, 2009

Time: 10:30 - 12:10

Location: Room N258

Session Chair:TBD

- 10:30 **9.1-1** EFFICIENT QUASI-LOSSLESS IMAGE COMPRESSION FOR MEMORY BANDWIDTH REDUCTION
Hark-Soo Kim, Moon-Cheol Kim, *Korea Polytechnic University, South Korea*; Kyoung-won Lim, *DTV Lab. LG Electronics. Inc., South Korea*; Eung-Tae Kim, *Korea Polytechnic University, South Korea*
- 10:50 **9.1-2** A RATE CONTROL TECHNIQUE FOR H.264/AVC USING SUBJECTIVE QUALITY OF VIDEO
Lasith Yasakethu, *University of Surrey, United Kingdom*; Steven Adedoyin, *University of Surrey UK, United Kingdom*; Dr. Anil Fernando, Prof. Ahmet Kondozi, *University of Surrey, United Kingdom*
- 11:10 **9.1-3** A GMM BASED AUTOMATIC RED EYE DETECTION ALGORITHM
Mithun Uliyar, *Aricent, India*; Krishna A.G., *Insilica, India*; S.S.B.K.Gupta Pallapothu, *Nxp, India*; Jayaprakash pai, *Aricent, India*
- 11:30 **9.1-4** AN H.264-BASED SCHEME FOR 2D TO 3D VIDEO CONVERSION
Mahsa Talebpourazad, Panos Nasiopoulos, Rabab K. Ward, *UBC, Canada*
- 11:50 **9.1-5** SEGMENTATION OF MOVING OBJECT FOR CONTENT BASED APPLICATIONS
M. Ali Akber Dewan, M. Julius Hossain, Oksam Chae, *Kyung Hee University, South Korea*

SESSION 9.3: Channel Estimation OFDM

Date: January 14, 2009

Time: 10:30 - 12:10

Location: Room N262

Chair: Uwe E. Kraus, *University of Wuppertal*

Co-Chair: Paul Snopko, Techwell, Inc

- 10:30 **9.3-1** ML-BASED ITERATIVE CHANNEL AND SPATIAL COVARIANCE ESTIMATION IN ASYNCHRONOUS INTERFERENCE ENVIRONMENT FOR OFDMA SYSTEM
Jun Hee Jang, Jung Su Han, *Sungkyunkwan University, South Korea*; Sung Soo Kim, *Samsung Electronics, South Korea*; Hyung-Jin Choi, *Sungkyunkwan University, South Korea*
- 10:50 **9.3-2** NEW OFDM SYSTEM WITHOUT GUARD INTERVAL
Yafei Hou, *Research Center for Information and Communication Systems, Japan*; Tomohiro Hase, *Ryukoku University, Japan*
- 11:10 **9.3-3** DESIGN AND FPGA IMPLEMENTATION OF AN OFDMA BASEBAND MODEM FOR 3GPP-LTE PHYSICAL LAYER
F. Javier Lopez-Martinez, Eduardo Del Castillo-Sánchez, Eduardo Martos-Naya, J. Tomás Entrambasaguas, *University of Málaga, Spain*
- 11:30 **9.3-4** A STUDY ON EFFICIENT COOPERATIVE RECEPTION SCHEME OF ONE SEGMENT ISDB-T
Takashi Okubo, Makoto Itami, *Tokyo University of Science, Japan*
- 11:50 **9.3-5** CMOS IMPLEMENTATION OF TX/RX CHAINS OF A MB-OFDM BASED UWB SYSTEM
Estibaliz Goikoetxea, Andoni Irizar, Ainhoa Cortés, Igone Vélez, *CEIT, Spain*

SESSION 9.5 - Poster 3

Date: January 14, 2009

Time: 10:10 - 12:10

Location: N256

P-3-1 DYNAMIC INTEGRATION OF ZIGBEE HOME NETWORKS INTO HOME GATEWAYS USING OSGI SERVICE REGISTRY
Young-Guk Ha, *Konkuk University, South Korea*

P-3-2 BLIND VEHICLE'S SOUND DETECTING TECHNIQUE FOR ADVANCED SAFETY-DRIVING SYSTEM
Shinichi Yoshizawa, Yoshihisa Nakatoh, *Matsushita Electric Industrial Co., Ltd., Japan*

P-3-3 REAL-TIME SEGMENTATION OF RADIO BROADCAST CONTENT IN RADIO DEVICES
Ralph van Dinther, Martin McKinney, *Philips Research Laboratories, Netherlands*; Hong Li, *NXP Research, Netherlands*

P-3-4 PERFORMANCE OF THE PIPE-BASED TRANSMISSION SYSTEM IN THE REAL FIELD
Higuma Toshiyasu, *MITSUBISHI ELECTRIC, Japan*

P-3-5 GPU-BASED X SERVER ON TOP OF EGL AND OPENVG
Dongkyun Jeong, *Samsung Electronics, South Korea*; Kamalneet Singh, *Samsung Electronics, India*; Namin Kim, Soochan Lim, *Samsung Electronics, South Korea*

P-3-6 DETECTING HOME SERVICES INDEPENDENTLY ON SERVICE STORAGES UNDER SEMANTIC HOME NETWORK ENVIRONMENT
Jiseong Son, *Korea University, South Korea*; Dongwon Jeong, *Kunsan National University, South Korea*; Doo-Kwon Baik, *Korea University, South Korea*

P-3-7 EMBEDDED QUAD-CORE MEDIA PROCESSOR SOC WITH IMPLICATIVE DYNAMIC PARALLEL PROGRAMMING MODEL
Young-Su Kwon, Bon-Tae Koo, Nak-Woong Eum, *Electronics and Telecommunications Research Institute, South Korea*

P-3-8 STUDY ON THE COEXISTENCE OF TWO TYPES OF PLCS IN HF BAND
Akihito Suzuki, Kenta Senda, Masahiro Inoue, *Shibaura Institute of Technology, Japan*

P-3-9 HOME NETWORK SYSTEM SUPPORTING CONSUMER ELECTRONICS RECALL
Hokuto Nawasaki, Hiroyuki Oono, Masahiro Inoue, *Shibaura Institute of Technology, Japan*

P-3-10 DESIGN OF THE AUTONOMOUS FAULT MANAGER FOR LEARNING AND ESTIMATING HOME NETWORK FAULTS
Chang Eun Lee, *ETRI (Electronics and Telecommunications Research Institute), South Korea*; Kyeong Deok Moon, *ETRI, South Korea*

P-3-11 AN EFFICIENT MULTIMEDIA FILE SYSTEM FOR NAND FLASH MEMORY STORAGE
Sang Oh Park, Sung Jo Kim, *Chung-Ang University, South Korea*

P-3-12 TV PROGRAM RECOMMENDATION FOR GROUPS BASED ON MULTIDIMENSIONAL TV-ANYTIME CLASSIFICATIONS
Alberto Gil, Yolanda Blanco, Martín López, Jose Pazos, *University of Vigo, Spain*; Rafael Sotelo, *University of Motevideo, Uruguay*

P-3-13 HOME APPLIANCE ENERGY MONITORING AND CONTROLLING BASED ON POWER LINE COMMUNICAION
Chia-Hung Lien, *Lee-Ming Institute of Technology, Taiwan*; Ying-Wen Bai, Hsien-Chung Chen, *Fu Jen Catholic University, Taiwan*; Chi-Huang Hung, *Lee-Ming Institute of Technology, Taiwan*

P-3-14 INTERACTIVE CONTENTS PLAYER FOR RICH MEDIA SERVICE
Injae Lee, Jihun Cha, Hankyu Lee, Jinwoo Hong, *ETRI, South Korea*

P-3-15 DESIGN AND IMPLEMENTATION OF A SERVICE ORIENTED POWER SAVING SYSTEM FOR THE HOME NETWORK
Jong-Hoon Lee, *ETRI, South Korea*

P-3-16 PRACTICAL ROBUST LOCALIZATION OVER OBSTRUCTED INTERFERENCES IN WIRELESS SENSOR NETWORKS
Kong Youngbae, *Korea University, South Korea*; Kwon Younggoo, *Kunkuk University, South Korea*; Park Gwitae, *Korea University, South Korea*

P-3-17 AGENT-BASED USER MOBILITY SUPPORT MECHANISM IN RFID NETWORKING ENVIRONMENT

Dong Geun Yoon, *Chungbuk National University, South Korea*; Jong Min Lee, Myung Ju Yu, Seong Gon Choi, *ChungBuk National University, South Korea*

P-3-18 EVENT DETECTION AND TARGET TRACKING BASED ON CO-OPERATIVE MULTI-CAMERA SYSTEM

I-Cheng Chang, *National Dong Hwa University, CSIE, Taiwan*

P-3-19 A LOW-COST SOC ARCHITECTURE FOR THE NEXT-GENERATION HOME-NETWORKED SET-TOP BOX

Stuart Ryan, Andrew Jones, Robert Deaves, *STMicroelectronics, United Kingdom*

P-3-20 A REAL TIME PUPIL LOCATION SYSTEM USING MULTIPLE ILLUMINATIONS CLUSTERING UNDER VARYING ENVIRONMENT

Mi Young Nam, *Inha University, South Korea*; Phill Kyu Rhee, *Inha Univ, South Korea*

SESSION 10.2: Display Driver Electronics

Date: January 14, 2009

Time: 14:20 - 16:00

Location: Room N260

Chair: Wang-He Lou, Mitsubishi Digital Electronics America, Inc.

Co-Chair: Atul Batra, Marvell Semiconductors, Inc

14:20 **10.2-1 AN INTEGRATED LOW-POWER HIGH-VOLTAGE DRIVING CIRCUIT FOR DIGITAL MICROMIRROR DEVICES (DMDTM)**
Jianbai Wang, James Huffman, James Hall, *Texas Instruments, United States*

14:45 **10.2-2 CONFIGURABLE TIMING CONTROLLER DESIGN FOR ACTIVE MATRIX ELECTROPHORETIC DISPLAY WITH 16 GRAY LEVELS**
Wen-Chung Kao, *National Taiwan Normal University, Taiwan*

15:10 **10.2-3 AN EFFICIENT ARCHITECTURE OF ENCODER AND DECODER FOR DISPLAYPORT PHYSICAL LAYER**
Yongtae Kim, Junyoung Song, Woonhyung Heo, Chulwoo Kim, *Korea University, South Korea*

15:35 **10.2-4 AN ADVANCED HYBRID IMAGE CODEC FOR FRAME MEMORY REDUCTION IN LCD OVERDRIVE**
Jun Wang, Kyeongyuk Min, Jongwha Chong, *Hanyang Univ., South Korea*

SESSION 10.3: Wireless Services and Networks II

Date: January 14, 2009

Time: 14:20 - 16:00

Location: Room N262

Chair: Paul Snopko, *Techwell, Inc.*

Co-Chair: Stu Lipoff, IP Action Partners

14:20 **10.3-1 BEHAVIOR OF 802.11G TRAFFIC AT HIGH SUSTAINED BIT RATES IN THE HOME**

Samuel Russ, *University of South Alabama, United States*

- 14:40 **10.3-2** INTRODUCTION OF THE INTEGRATED MEASUREMENT AND ANALYSIS SYSTEM FOR DIGITAL BROADCASTING
Young-Woo Suh, *BTRI, KBS, South Korea*
- 15:00 **10.3-3** DESIGNING ROBUST ZIGBEE NETWORKS WITH ENHANCED SELF-CONFIGURATION
Kwang-il Hwang, *Incheon City College, South Korea*
- 15:20 **10.3-4** MASHING UP TV AND THE WEB IN THE MOBILE WORLD
Ana Fernández Vilas, Rebeca Díaz Redondo, Jose J. Pazos Arias, Alberto Gil Solla, Jorge García Duque, *University of Vigo, Spain*
- 15:40 **10.3-5** CROSS LAYER INTERACTION FOR IP CENTRIC VIDEO APPLICATIONS IN MIMO BROADBAND WIRELESS NETWORKS
David Halls, Pierre Ferre, George Zaggoulos, Andrew Nix, Mark Beach, *University of Bristol, United Kingdom*

SESSION 10-5 - Poster Session 4

Date: January 14, 2009

Time: 14:10 - 16:00

Location: Room N256

P-4-1 ACCURATE DEPTH APPROXIMATION THROUGH BEZIER-BERNSTEIN POLYNOMIAL FOR 3D CAMERAS
Muhammad Tariq Mahmood, Seongo Shim, Asifullah Khan, Tae-Sun Choi, *Gwangju Institute of Science and Technology, South Korea*

P-4-2 A NOISE ROBUST CONTENT-BASED MUSIC RETRIEVAL SYSTEM
Won-Jung Yoon, Kyu-Sik Park, *Dankook University, South Korea*

P-4-3 EFFECTIVE PROCESS OF SIGNALING INFORMATION FOR DIGITAL BROADCAST RECORDING
Jinyong Ahn, Keumyong Oh, *Samsung Electronics, South Korea*

P-4-4 ADVANCED T-DMB WITH HIERARCHICAL MODULATION AND SCALABLE VIDEO CODING
Haechul Choi, Il Hong Shin, Jong-Soo Lim, Jin Woo Hong, *ETRI, South Korea*

P-4-5 APPLICATION OF SHAPE ANALYSIS TECHNIQUES FOR IMPROVED CASA-BASED SPEECH SEPARATION
Yun-Kyung Lee, Oh-Wook Kwon, *Chungbuk National University, South Korea*

P-4-6 DEVELOPMENT OF SUBJECTIVE QUALITY BASED ADAPTATION DECISION ENGINE FOR SVC IN MOBILE APPLICATION
Hosik Sohn, Cheon Seog Kim, Hana Yoo, Yong Man Ro, *ICU, South Korea*

P-4-7 ADULT IMAGE DETECTION WITH CLOSE-UP FACE CLASSIFICATION
Byeongcheol Choi, *ETRI, South Korea*

P-4-8 3D ACCESS CONTROL SYSTEM OF MULTIVIEW SEQUENCE CONTENTS

JeongEun Lim, *SAMSUNG ELECTRONICS CO., LTD., South Korea*; Hyung Seok Han, Dal Ho Lee, *Kyungwon University, South Korea*; Kwanghoon Sohn, *Yonsei University, South Korea*

P-4-9 CLONE RESISTANT MUTUAL AUTHENTICATION USING TWO BROADCAST ENCRYPTION

Sunnam Lee, Haksoo Ju, Bongseon Kim, *Samsung Electronics, South Korea*

P-4-10 DISTANCE TRACKING FOR THE REMOTE CONTROL OF AN MP3 PLAYER

Ying-Wen Bai, Yi-Fan Huang, *Fu Jen Catholic University, Taiwan*

P-4-11 AN OPTICAL AM VIDEO/PTZ DATA TRANSCEIVER FOR A VIDEO-BASED SURVEILLANCE NETWORK

Seunghyun Jang, Bonghyuk Park, Seungsik Lee, Sangsung Choi, *ETRI, South Korea*

P-4-12 NEW KEY ESCROW MODEL FOR THE LAWFUL INTERCEPTION IN 3GPP

Kyusuk Han, Chan Yeob Yeun, Kwangjo Kim, *Information and Communications University, South Korea*

P-4-13 RIDGE-BASED FINGERPRINT VERIFICATION FOR ENHANCED SECURITY

Seung-Hoon Chae, Sung Bum Pan, *Chosun Univ., South Korea*

P-4-14 HOME VIDEO MANAGEMENT SYSTEM WITH SEMANTIC INFORMATION

Hyun-Seok Min, Young Bok Lee, Wesley Neve, Yong Man Ro, *ICU, South Korea*

P-4-15 ROBUST LOCAL PRIVACY PROBLEM: RFID TAG AUTHENTICATION PROTOCOL

Jung-Sik Cho, Sung Kwon Kim, *Chung-Ang University, South Korea*

P-4-16 HIERARCHICAL CRGK FOR A LARGE-SCALE USER GROUP

Jihyun Park, *ETRI, South Korea*

P-4-17 DIVE : A P2P-BASED PERSONAL BROADCASTING SYSTEM FOR CONSUMER ELECTRONICS

O-Hoon Kwon, Sung Bin Im, Sang-Kwon Lee, Guanhua Zhang, *Samsung Electronics, South Korea*; Xiaofei Liao, *HUST, China*

P-4-18 HINT FILE-BASED IMPLEMENTATION OF CONTENTS NAVIGATION METHODS FOR SET-TOP BOX

Jin-Hwan Jeong, *Electronics and Telecommunications Research Institute, South Korea*; Yong-Ju Lee, Hag-Young Kim, *ETRI, South Korea*

P-4-19 THE APPLICATION OF DISCRETE COSINE TRANSFORM (DCT) COMBINED WITH THE NONLINEAR REGRESSION ROUTINE ON OPTICAL AUTO-FOCUSING

Meng-En Lee, Chien-Feng Chen, *National Kaohsiung Normal University, Taiwan*; Tsung-Nan Lin, *National Taiwan University, Taiwan*; Chun-Nan Chen, *Tamkang University, Taiwan*

P-4-20 A SET-TOP BOX FOR END-TO-END QOS MANAGEMENT AND HOME NETWORK GATEWAY IN IMS

Muhammad Shoaib Siddiqui, Syed Obaid Amin, Choong Seon Hong, *Kyung Hee University, South Korea*

P-4-21 REAL-TIME VIEWER DETECTION ALGORITHM FOR SMART EPG IN INTELLIGENT DTV ENVIRONMENT

Seung-Kyun Kim, *Korea University, South Korea*; Dongni Zhang, *Korea University, China*; Dae-Hwan Kim, Sang-Hee Park, Sung-Jea Ko, *Korea University, South Korea*

P-4-22 ENHANCING SURVIVABILITY OF INTERNET APPLIANCES USING AN ON-THE-FLY PACKET FILTERING METHOD

Hyong-Shik Kim, Jin-Hyong Ryu, Jae-Kook Lee, *Chungnam National University, South Korea*

SESSION 11.2: Display Enhancement & Improvement Techniques

Date: January 14, 2009

Time: 16:20 - 18:00

Location: Room N260

Chair: Atul Batra, *Marvell Semiconductors, Inc.*

Co-Chair: Wang Lou, *Mitsubishi Digital Electronics America, Inc.*

- 16:20 **11.2-1** ADAPTIVE COLOR CONVERSION ALGORITHM TO ACHIEVE BOTH HIGH BRIGHTNESS AND WIDE COLOR GAMUT
masahiro haraguchi, *SANYO Electric Co., Ltd., Japan*
- 16:40 **11.2-2** IMAGE QUALITY IMPROVEMENT FOR ELECTROPHORETIC DISPLAYS BY COMBINING CONTRAST ENHANCEMENT AND HALFTONING TECHNIQUES
Wen-Chung Kao, *National Taiwan Normal University, Taiwan*
- 17:00 **11.2-3** MOTION BLUR REDUCTION BY PRE-EMPHASIS WITH MOTION ADAPTIVE SYNTHETIC DETAIL SIGNALS
Carsten Dolar, Martin M. Richter, Hartmut Schröder, *Dortmund University of Technology, Circuits and Systems Lab, Germany*; Oliver Erdler, Piergiorgio Sartor, *Sony Deutschland GmbH, Germany*
- 17:20 **11.2-4** A NOVEL POST-PROCESSING ALGORITHM FOR PARALLELLY DECODED U-HDTV VIDEO SEQUENCE
Seung-Won Jung, Chun-Su Park, *Korea University, South Korea*; Hae-Chul Choi, *Electronics and Telecommunications Research Institute, South Korea*; Aldo W. Morales, *Penn State Harrisburg, United States*; Sung-Jea Ko, *Korea University, South Korea*
- 17:40 **11.2-5** LOW COST LCD PANEL FRAME RATE DOUBLING BY APPLYING MOTION CONTROLLED DYNAMIC FRAME INSERTION
Haiyan He, Johan G Janssen, Erwin Bellers, *NXP semiconductors, United States*

SESSION 11.3: Wireless Services and Networks III

Date: January 14, 2009

Time: 16:20 - 18:00

Location: Room N262

Chair: Stu Lipoff, *IP Action Partners*

Co-Chair: Bill Rowe, *WARowe Consultancy*

- 16:20 **11.3-1** ALLOCATION OF IN-HOME NETWORK RESOURCES TO
COMPETING MULTIMEDIA STREAMS USING EDCA
Igor Radovanovic, Waqar Aslam, *Eindhoven University, Netherlands*; J.J.
Lukkien, *Eindhoven University of Technology, Netherlands*
- 16:45 **11.3-2** DRSC: SELF-CONFIGURED ENERGY-EFFICIENT TOPOLOGY
CONTROL ALGORITHM FOR 802.15.4-BASED WIRELESS SENSOR
NETWORKS
Andrey Salov, *Kangwon National University, South Korea*
- 17:10 **11.3-3** SPONSORED ADVERTISING FOR IDTV: A PERSONALIZED AND
CONTENT-AWARE APPROACH
Rebeca Díaz Redondo, Ana Fernández Vilas, José J. Pazos Arias, Manuel
Ramos Cabrer, Jorge García Duque, *University of Vigo, Spain*
- 17:35 **11.3-4** PRACTICAL INDOOR POSITIONING SYSTEM USING RECEIVED
SIGNAL STRENGTH IN IEEE 802.15.4 NETWORKS
Yujin Lim, Jaesung Park, *University of Suwon, South Korea*

SESSION 11.4: 3D, Gaming and Related Technologies

Date: January 14, 2009

Time: 16:20 - 18:00

Location: Room N264

Chair: Guido T.G. Volleberg, *Philips Consumer Lifestyle*

Co-Chair: Peter Corcoran, *National University of Ireland, Galway*

- 16:20 **11.4-1** REAL-TIME IMPLEMENTATION OF DEPTH MAP POST-
PROCESSING FOR 3D-TV ON A PROGRAMMABLE DSP (TRIMEDIA)
Om Prakash Gangwal, *NXP semiconductors, Netherlands*; Etienne Coezijn,
Philips Consumer Lifestyle, Netherlands; Robert-Paul Berretty, *Philips
Research, Netherlands*
- 16:40 **11.4-2** ESSL COMPILER FOR EMBEDDED 3D GRAPHICS
ARCHITECTURE
Mathieu Robart, Steve Hill, *STMicroelectronics, United Kingdom*
- 17:00 **11.4-3** OPENVG PAINT SUBSYSTEM OVER OPENGL ES SHADERS
Mathieu Robart, *STMicroelectronics, United Kingdom*
- 17:20 **11.4-4** FACIAL COLOR ADAPTIVE TECHNIQUE BASED ON THE THEORY
OF EMOTION-COLOR ASSOCIATION AND ANALYSIS OF ANIMATION
Kyu-Ho Park, Tae-Yong Kim, *Game Technique and Application Laboratory,
South Korea*

17:40 **11.4-5 H.264 VIDEO DECODING COMPATIBLE WITH VECTOR GRAPHICS**
Danilo Pau, Francesco Mariotti, Marco Orlandini, Luca Pezzoni,
STMicroelectronics, Italy