

# 2004 IEEE International Symposium on Consumer Electronics

**Draft program**

Photo

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# 2004 IEEE International Symposium on Consumer Electronics

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**An Agent Enabled DRM System with EPLE for Network Streaming and Distribution of Digital Audiovisual Content**

*Bo Lan and Tzekian Tan*

**Increasing Robustness of a Patchwork Audio Watermarking Algorithm Using Attack Characterization**

*Nedeljko Cvejic and Ilijana Tujkovic*

**Block-Based Watermarking in the DCT Domain**

*Yoon-Hee Choi and Tae-Sun Choi*

**Improving Robustness of Visible Watermarking Schemes for Images**

*Shinfeng D. Lin and Shih-Chieh Shie*

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**A R-D Optimization Based MPEG-2 Quantization Algorithm**

*Jiansong Wang, Jinghui Chu and Sile Yu*

**MAVD: MPEG-2 Audio Video Decode System on MDSP™**

*Ganesh Yadav, R K Singh and Vipin Chaudhary*

**An Approach for Interactive Television Based on Insertion of Hypermedia Information in MPEG Standard Video**

*Andre Leon S. Gradwohl and Yuzo Iano*

**A Reduced Memory MPEG Video Decoder**

*Patricia Chiang and Lucas Hui*

**Systems Engineering for MHP Applications**

*Matthias Erdmann, Tibor Kunert and Markus Mehnert*

**Terminal Architecture Issues for Interactive and Reactive TV Media using MHP-Java and MPEG4**

*Keith Baker, Rop Pulles and Pavel Sasno*

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**Efficient Implementation of MPEG-4 Object-Based Video Encoder**

*Lei Sun and Wenjun Zhang*

**A Room Acoustics Design Tool for MPEG-4 Conforming Scene Design**

*Ulrich Reiter, Fabian Körner, Michael Kootz and Stefan Ruffer*

**A Plug-in Based Audio Rendering Concept for an MPEG-4 Audio Subset**

*Ulrich Reiter and Mathias Schwark*

**Novel Mode-Selection Mechanism for Realizing a Live MPEG-4 ASP Encoder**  
*Sung-Wen Wang, Yi-Shin Tung, Hsien-Shuo Chen, Ja-Ling Wu and Sheng-Ho Wang*

**Data Storage Exploration and Bandwidth Analysis for Distributed MPEG-4 Decoding**  
*Milan Pastrnak and Peter N.H. de With*

**A New Method of Selective Enhancement for MPEG-2 to MPEG-4 FGS Transcoding**  
*Xiaowei Song, Yu Liu, Qinggang Meng, Jianfu Teng and Guiling Li*

**The Shadow Tool – New Visual Cues for MPEG 4 Authors**  
*Helge Drumm and Uwe Kühhirt*

**Perceptual MPEG4 Video Encryption and Its Usage in Video-on-Demand Systems**  
*Shiguo Lian, Dengpan Ye, Jinsheng Sun and Zhiquan Wang*

**Description of Audiovisual Virtual 3D Scenes: MPEG-4 Perceptual Parameters in the Auditory Domain**  
*Andreas Dantele and Ulrich Reiter*

**MPEG-21 & DIDL: Dawn of a New Multimedia Era**  
*Sadegh Hashemipour and Maaruf Ali*

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**Visually Lossless Adaptive Compression for Medical Images with JPEG 2000**  
*David Wu, Damian M. Tan and Hong Ren Wu*

**High Performance Two-Symbol Arithmetic Encoder in JPEG 2000**  
*Yu-Wei Chang, Hung-Chi Fang and Liang-Gee Chen*

**Masked Motion JPEG 2000: a New Video Compression Scheme Based on JPEG2000**  
*David Faura and Patrick Garda*

**Low-power and High Speed VLSI Architecture of 2-D DWT for JPEG2000**  
*Xuguang Lan, Nanning Zheng and Yuehu Liu*

**JPEG Rate Control Algorithm for Multimedia**  
*Arcangelo Bruna, Stewart Smith, Filippo Vella and Filippo Naccari*

**Mesh Based and Object Oriented MCTF Wavelet Coding Exploiting GA Motion Optimization**  
*Cesare Feci, Massimo Valiani, Fabrizio Frescura and Saverio Cacopardi*

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**An Analysis of Real Time Implementation of Fourier Transform-based Frequency Recognition Algorithms**  
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*Hao Hu, Paul M. Hofman and Gerard de Haan*

### **Color Correction Method for CMOS Camera Phone Image**

*Chan-Ho Han, Seong-Geun Kwon, Seung-Jin Lee, Eun-Su Kim and Kyu-Ik Sohng*

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*Jörn Jachalsky, Martin Wahle, Peter Pirsch, Winfried Gehrke and Thomas Hinz*

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*Alfio Castorina, Alessandro Capra, Salvatore Curti, Marco La Cascia and Valentina Lo Verde*

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*Youngbin Chang, Jaeweon Cho, Panyuh Joo and Hyeonwoo Lee*

### **Improving the Mobility of DVB Handheld Devices with Inter-Carrier Interference Compensation**

*Karsten Schmidt, Christian Günter and Albrecht Rothermel*

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*Hee-Wook Kim, Hyung-Myung Kim and Do-Seob Ahn*

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*Michael Kornfeld*

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*Jazilah Jamaluddin, Nikoletta Zotou, Reuben Edwards and Paul Coulton*

**A Comparative Study of Mobile Application Development in Symbian and J2ME using Example of a Live Football Results Service Operating over GPRS**

*Omer Rashid, Robert Thompson, Paul Coulton and Reuben Edwards*

**Mobile Multimedia Instant Messaging and Presence Services: the Architecture and Protocols**

*Mahfuzur Rahman, Bin Hu, John Buford and Alan Kaplan*

**Enhancing security in Wireless Networks**

*Stelios Koutroubinas, Theodore Karoubalis, Panagiotis Rozos, Panayiotis Nastou and Panayiota Bei*

**Speckled Computing: Disruptive Technology for Networked Information Appliances**

*D.K Arvind and K.J Wong*

**Widening Access to Broadband Hotspots Employing Bluetooth**

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**Incorporation of User Behavioural Patterns in the Management of Quality-of-Service (QoS) for Future Mobile Networks**

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**Performance Improvement of a Decision-Feedback Equalizer in Terrestrial DTV Receivers by Reduction of Error Propagation**

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**Embedded Architecture of IEEE802.11i Cipher Algorithms**

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**Broadcasting Associated Service Architecture and its Synchronization Support**

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**Forward Link Capacity of the WCDMA System Using High Altitude Platform Stations**

*Tae Chul Hong, Bon-Jun Ku, Jong-Min Park and Do-Seob Ahn*

**Improved Multistage Decoding of Multilevel Codes for Digital Radio Mondiale (DRM)**

*Volker Fischer, Alexander Kurpiers and Florian Kulla*

**Simulation of Impedance and Propagation in PLC Networks**

*Dubravko Sabolić, Alen Bažant and Dinko Begušić*

**Concurrent Data Transmission on Analog Telephone Channel by Data Hiding Technique**

*Siyue Chen, Henry Leung and Heping Ding*

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**Content Adaptive Image De-blocking**

*M. Zhao, R. E. J. Kneepkens, P. M. Hofman and Gerard de Haan*

**Delta Rate Control for DV Coding Standard**

*Antonio Navarro, Paulo Gouveia and Antonio Silva*

**Algorithm and Architecture Design for De-Interlacing System**

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**Intra-field De-interlacing with Advanced Up-scaling Methods**

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**Natural Scenes Enhancement by Adaptive Color Correction**

*Filippo Naccari, Sebastiano Battiato, Arcangelo Bruna, Silvia Cariolo and Alfio Castorina*

**MV-based Adaptive Transcoding Technique for Reduced Spatial Resolution**

*Yan Xu, Qinggang Meng, Yu Liu, Ying Guo and Guiling Li,*

**Chroma Error Analysis and Compensation for Heterogeneous Video Transcoding**

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**A Novel Rate Control Algorithm in the Heterogeneous Transcoding**

*Ying Guo, Zhensheng Yu, Qinggang Meng, Yan Xu and Guiling Li*

**A Rate-Constrained Full Search Algorithm for Fast Motion Estimation  
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*Byung Cheol Song and Kang Wook Chun*

**Edge-and-Motion-Based Semantic Video Object Extraction and Application  
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*Yih-Haw Jan and David W. Lin*

**Motion Compensated Frame Rate Conversion by Overlapped Block-based  
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*Taehyeun Ha, Seongjoo Lee and Jaeseok Kim*

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**Multi-Channel Video Streaming Server for Surveillance Systems**

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**Automatic Video Contrast Enhancement**

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**Enhanced Polyharmonic Broadcasting Scheme for Popular Videos**

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**A 380MHz two-stage OEIC for the use in DVD Pickup Units**

*Jürgen Leeb, Kerstin Schneider and Horst Zimmermann*

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*Y. Hu, A. Simpson, K. McAdoo and J. Cush*

**A Rate-Control Scheme Using Fast Frame-Rate Controlling and Adaptive Rate-Quantization Modeling for H.263**

*Din-Yuan Chan, Chun-Yuan Chang, Shou-Jen Lin and Chung-Wei Lin*

**A New Bit Estimation Scheme for H.264 Rate Control**

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**Fast Inter Mode Decision with Adaptive Thresholds for H.264 Encoding**

*D. Wu, S. Wu, K. P. Lim, F. Pan, Z. G. Li and C.C. Ko*

**Evaluation and Integration of Markov Noise Reduction Technique in H264/AVC**

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**A Study of the Multimedia Data Service Using External Devices Synchronised with a TV Program**

*Hirokazu Konishi and Kenjiro Kai*

**A Distributed Multimedia Communication System and its Applications to E-Learning**

*Hans L. Cycon, Thomas C. Schmidt, Matthias Wählisch, Mark Palkow and Henrik Regensburg*

**A User-Centered Control System for Personalized Multimedia Channel Selection**

*Wei-Po Lee and Jian-Hsin Wang*

**Semantic Organization to Enhance Active Learning Based on Distributed Multimedia Educational Resources**

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**An SDR Inspired Design for the FPGA Implementation of 802.11a Baseband System**

*Paul Coulton and Dylan Carline*

**Fast IDCT Implementation on Hardware Accelerator Devices**

*Antonio Silva, Orlando Nunes, Carlos Aragao and Antonio Navarro*

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**Web-based Query Engine for Content-based and Semantic Retrieval of Audio**

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**The IP Datacast System - Overview and Mobility Aspects**

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**Performance Evaluation of Building Network System Integration Using TCP/IP**

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