

Saturday, January 30, 2010, 10.00 am to 11.40 am

Time/Session (Venue)	A1: Codes for Communication and Storage (Hall 2)	B1: Speaker and Emotion Recognition (Hall 3)	C1: Network Protocols and Applications (Hall 1)
10:00 am	Interference Alignment as a Tool in Network Coding as Applied to Distributed Storage K. V. Rashmi, N. B. Shah, P. V. Kumar and K. Ramchandran.	On the Use of Perceptual Line Spectral Pairs Frequencies for Speaker Identification Md. Sahidullah and G. Saha	
10:16 am	Explicit Codes Uniformly Reducing Repair Bandwidth in Distributed Storage N. B. Shah, K. V. Rashmi, P. V. Kumar and K. Ramchandran.	Speaker Information from Subband Energies of Linear Prediction Residual D. Pati and S. R. M. Prasanna	Network (Tree) Topology Inference Based on Prufer Sequence V. Chellappan and K. Krithivasan
10:32 am	EG-LDPC Codes for the Erasure Wiretap Channel V. Rajaraman and A. Thangaraj.	Fast Approach to Speaker Identification for Large Population using MLLR and Sufficient Statistics A. K. Sarkar, S. P. Rath and S. Umesh	Opportunistic Splitting for Scheduling via Stochastic Approximation V. Joseph, V. Sharma and U. Mukherji
10:48 am	Simulation Study of LDPC Codes for Nonuniform Sources with Side Information in Slepian-Wolf Coding K. B. Raghunadh, K. R. Ramakrishnan and K. S. Dasgupta	Vocal Tract Length Normalization Factor Based Speaker-Cluster UBM for Speaker A. K. Sarkar, S. P. Rath and S. Umesh	Distributed Route Control Schemes to Load Balance Incoming Traffic in Multihomed Stub Networks A. Sairam and G. Barua
11:04 am	VHDL Implementation of Two-State Multiple Turbo Codes V. Bhatia and A. Banerjee.	Discriminative Training of Gaussian Mixture Speaker Models: A New Approach S. Madikeri and H. Murthy	Employing Bayesian Belief Networks for Energy Efficient Network Management A. Bashar, G. Parr, S. Chaudhari, M. Subramanian, T. Gonsalves, S. McClean and B. Scotney
11:20 am	Common Architecture for Decoding Turbo and LDPC Codes T. S. V. Gautham, A. Thangaraj and D. Jalihal.	Vocal Emotion Recognition in Five Languages of Assam Using Features Based on MFCCs and Eigenvalues of Autocorrelation Matrix and in Presence of Babble Noise A. Kandali, A. Routray and T. Basu	

Saturday, January 30, 2010, 12 noon to 1.30 pm

Time/Session (Venue)	A2: Multiple Antenna Systems I (Hall 2)	B2: Image and Video Processing (Hall 3)	C2: Broadband RF Antennas (Hall 1)
12 noon	No-Zero-Entry, Square, Single-Symbol ML Decodable STBCs A. Pramanik and B. Sundar Rajan.	A Novel Approach to Generate Up-sampled Tomographic Images using Combination of Rotated Hexagonal Lattices N. Dixit and J. Sivaswamy	Development of CPW-Fed UWB Printed Slot Antenna J. William and R. Nakkeeran
12:18 pm	Performance Analysis of Alamouti Scheme with Transmit Antenna Selection in MISO Systems Y. Trivedi and A. K. Chaturvedi.	Fusion Based Object Detection B. Suja and M. John	A Double U-slot Patch Antenna with Dual Wideband Characteristics B. Vedaprabhu and K. J. Vinoy
12:36 pm	A New Diagonally Layered Spatial Multiplexing Scheme with Limited Feedback M. Deepti and R. D. Koilpillai.	VC-1 Video Decoder Optimization on ARM Cortex-A8 with NEON C. Pujara, A. Modi, G. Sandeep, S. Inamdar, D. Kolavil and V. Tholath	Broadband reactively coupled E-shaped Microstrip Antennas A. Deshmukh and K. P. Ray
12:54 pm	Performance of a L-Branch Predetection EGC Receiver over Independent Hoyt Fading Channels for M-ary Coherent and Noncoherent Modulations Using PDF Based Approach A. Baid, P. Kotkar and P. R. Sahu	Fourier Based Rotation Invariant Texture Features for Content Based Image Retrieval B. Sathyabama and S. Raju	Elliptic slot antenna for Broadband wireless communications D. Packiaraj, K. J. Vinoy, M. Ramesh and A. T. Kalghatgi
1:12 pm	Performance of <i>L</i> -MRC Receiver over Independent Hoyt Fading Channels R. Subadar and P. R. Sahu.		Resonator Based Compact Ultra-Wideband and Notched Wideband Filters S. O. Coumar, R. Nakkeeran and K. Thirumalaivasan

Saturday, January 30, 2010, 2.20 pm to 3.50 pm

Time/Session (Venue)	A3: Multicarrier Systems (Hall 2)	B3: Signal Processing Theory (Hall 3)	C3: Wireless and Sensor Networks (Hall 1)
2:20 pm	Orthogonal Frequency Division Multiple Access in WiMAX and LTE: A Comparison S. Srikanth and P. A. Murugesu Pandian	A Class of Time-Frequency product optimized Biorthogonal Wavelet Filter Banks R. Kolte, P. Patwardhan and V. Gadre	On the Bounds of Separability in Sensor Networks B. Santhana Krishnan
2:38 pm	Subcarrier and Power Adaptation for Multiuser OFDMA-based Cognitive Radio Systems G. Bansal, Z. Hasan, Md. Hossain and V. Bhargava	Coding Gain Optimized Finite Impulse Response(FIR) Paraunitary(PU) Filter Banks A. Jhavar, P. Ginde, P. Patwardhan and V. Gadre	Characterization of Aloha in Underwater Wireless Networks P. Mandal, Swades De and S. Chakraborty.
2:56 pm	A Low Complexity Active Interference Cancellation Method for OFDM based Cognitive Radios R. Dhasarathan, P. A. Murugesu Pandian and S. Srikanth	Generalised Pseudocirculants: Dual-rate systems, Cyclostationary signals R. Dhuli and B. Lall	Neighbor Oblivious Link Reversal over Duty-Cycled WSNs S. Ramachandran, S. V. R. Anand, M. Hegde, A. Kumar and R. Sundaresan.
3:14 pm	Krylov Algorithms for FEXT Cancellation in Upstream MIMO VDSL S. M. Zafaruddin, P. Agrawal, S. Prakriya and S. Prasad.	Cyclostationary signals in multirate linear systems R. Dhuli and B. Lall	Performance Analysis of Zone Routing Protocols in Ad Hoc Networks B. Patel and S. Srivastava.
3:32 am	Exploiting Signal and Noise Statistics for Fixed Point FFT Design Optimization in OFDM systems S. Ramakrishnan, J. Balakrishnan and K. Ramasubramanian.	The Canonic Linear-Phase FIR Lattice Structures Y. Satya Sudhakar and K. V. S. Hari	Deriving a Generic Energy Consumption Model for Network Enabled Devices V. Jain, G. Parr, D. W. Bustard and P. J. Morrow.

Saturday, January 30, 2010, 4.10 pm to 5.40 pm

Time/Session (Venue)	A4: Multihop and Relay Networks (Hall 2)	B4: Speech Coding and Synthesis (Hall 3)	C4: Network Applications and Analysis (Hall 1)
4:10 pm	On Approximately Universal Schemes for Two-hop Network K. Vinodh, A. Ray and P. V. Kumar	A low-bit rate segment vocoder using minimum residual energy criteria A. Pradhan, S. Chevireddy, V. Kamakoti and H. Murthy	Social Network Analysis of the Short Message Service V. Tomar, H. Asnani, A. Karandikar, V. Chander, S. Agrawal and P. Kapadia
4:28 pm	Performance Analysis of a Multi-Relay Cooperative Diversity Network with Decode and Forward Relaying M. D. Selvaraj and R. K. Mallik	Trajectory and surface modeling of LSF for low rate speech coding D. Motamarri and P. Rao	Internet Activity Analysis Through Proxy Log K. Bommepally, T. K. Glisa, J. J. Prakash, R. Sanasam and H. A. Murthy
4:46 pm	Implications Of The Half-Duplex Constraint On Relay-Aided Cooperation Using Rateless Codes R. Meshram and N. Mehta	Using Polysyllabic units for Text to Speech Synthesis in Indian languages V. M. Vishwanath, A. Bellur, K. Badri Narayan, D. M. Thakare, A. Susan, N. M. Suthakar and H. A. Murthy	Mobile Payment Architectures for India D. Kumar, T. Gonsalves, A. Jhunjhunwala and G. Raina
5:04 pm	Outage Performance of Dual-hop Opportunistic Relaying Compared to a Single-hop SIMO under Rayleigh Fading H. Katiyar and R. Bhattacharjee	Speech Synthesis using Artificial Neural Networks E. Veera Raghavendra, P. Vijayaditya and K. Prahallad	Study Element based adaption of lecture videos to mobile devices G. N. Murthy and S. Iyer
5:22 pm	Closed-Form Error Analysis of Noncoherent FSK for Dual hop Relay Network in Nakagami-m Fading Channel S. N. Datta, R. Roy and S. Chakrabarti	A Multilingual Screen Reader in Indian Languages E. Veera Raghavendra and K. Prahallad	

Sunday, January 31, 2010, 10.00 am to 11.30 am

Time/Session (Venue)	A5: Cellular Systems (Hall 2)	B5: Automatic Speech Recognition (Hall 3)	C5: Wireless and Ad Hoc networks (Hall 1)
10:00 am	Robust LLR aided Low Feedback Precoding for Interference Alignment N. Vinoth, Arun Ayyar, B. Ramamurthi and K. Giridhar	Effect of Jacobian Compensation in Linear Transformation based VTLN under Matched and Mis-matched Speaker Conditions S. P. Rath, A. K. Sarkar and S. Umesh	Mitigation of Exposed Terminals Problem with Differential Capture Capable Receivers M. M. Vegad, Swades De and B. Lall
10:18 am	An Algorithm for Distributed Cooperative Precoder Selection in a Cellular Network Vinosh B. James, B. Ramamurthi and V. Ganesh	Robust Syllable Segmentation and its Application to Syllable-centric Continuous Speech Recognition R. Janakiraman, J. C. Kumar and H. Murthy	Network Resource Availability Evaluation for IEEE802.11a/b based WLAN Carrying Different Service Types W. Luo and E. Bodanese
10:36 am	On Optimal Timer-Based Distributed Selection For Rate-Adaptive Multi-user Diversity Systems S. Ananda Theertha, N. Mehta and Virag Shah	KL Divergence Based Feature Switching in the Linguistic Search Space for Automatic Speech Recognition J. C. Kumar, R. Janakiraman and H. A. Murthy	TCP Cross Layer Adaptive Policy - Throughput Optimization over Wireless Links P. Dalal and K. S. Dasgupta
10:54 am	Performance Analysis of Subband-Level Channel Quality Indicator Feedback Scheme of LTE Sushruth D. and N. Mehta	Evaluating vowel pronunciation quality: Formant space matching versus ASR confidence scoring A. Patil, C. Gupta and Preeti Rao	A Frame Aggregation Scheduler for IEEE 802.11n T. Selvam and S. Srikanth
11:12 am	Performance Analysis of Active Handoff in CDMA2000 Femtocells G. Joshi, M. Yavuz and C. Patel	Robust Features Derived from Differentiated Phase Autocorrelation Spectrum for Speech Recognition S. H. Akhlagh and H. Marvi	Proactive Resource Reservation in Next-Generation Wireless Networks A. Ukil and J. Sen

Sunday, January 31, 2010, 11.50 am to 1.20 pm

Time/Session (Venue)	A6: Multicarrier and UWB Systems (Hall 2)	B6: Advanced Receivers, Estimation and Detection (Hall 3)	C6: RF and Optical Communication (Hall 1)
11:50 am	A Multicarrier CDMA Based Low Probability of Intercept Network S. Ghosal, D. Jalihal and K. Giridhar	Null-Space Exploiting Channel Shortening Prefilter (NE-CSP) for MIMO-OFDM Istdeo Singh and K. Giridhar	Characterizing multi-photon states using gated photo-detection A. Prabhakar, Shree Krishnamoorthy and S. Thiruthakkathevan
12:08 pm	Multiband OFDM with Insufficient Zero Padding B. Ray and S. Chakrabarti	Mean Square Robustness of Linear Game Theoretic Estimators R. Lakshmi Narayanan and K. Giridhar	Design of MEMS Components for All-Optical Code Based Router M. Shanmugapriya and M. Meenakshi
12:26 pm	IQ-Mismatch aware Baseband Receiver Design for Multiband OFDM based UWB modems B. Ray and S. Chakrabarti	A GLRT Detector in Partially Correlated Texture Based Compound-Gaussian Clutter Lakshi P. Roy and R. V. Raja Kumar	Modeling of Propagation Characteristics of Non-linear Transmission Lines with Loss Ankit Singh and K. J. Vinoy
12:44 pm	Impact of Multiple UWB Devices on IEEE 802.11a WLAN Systems R. Kshetrimayum and M. Santosh Reddy	Receiver-Only Optimized Vector Quantization for Fading Channels Sowmya R. and Chandra Murthy	Optical modulation schemes to implement BB84 and B92 protocols using frequency-coding method Pradeep Kumar
1:02 pm	Angle and Time of Arrival Statistics for Indoor UWB Communication A. Mittal, N. Agarwal and R. Bhattacharjee	Nonparametric techniques for graphical model-based target tracking in collaborative sensor groups Viji Paul and Rajbabu V.	

Sunday, January 31, 2010, 2.00 pm to 3.30 pm

Time/Session (Venue)	A7: Multiple Antenna Systems II (Hall 2)	B7: Signal Processing Applications (Hall 3)	C7: Survivability and Security (Hall 1)
2:00 pm	Improved Array Processing for Two-User Detection of Alamouti Code Manav Bhatnagar	Novel Preprocessing and HT-Based Peak-Finding Techniques for Detection of R-peaks in ECG Signal M. Sabarimalai Manikandan and R. Tyagi	NLHB: A Light-weight, Provably-secure Variant of the HB Protocol Using Simple Non-linear Functions M. Mukundan, A. Thangaraj, K. Viswanathan and Yogesh S.
2:18 pm	Low-Complexity, Information Lossless STBCs for Two-User MISO-MAC with Partial CSIT J. Harshan and B. Sundar Rajan	A melody detection user interface for polyphonic music S. Pant, V. Rao and Preeti Rao	An Improvement of Wang et al.'s Authentication Scheme Using Smart Cards Sandeep Sood, A. K. Sarje and K. Singh
2:36 pm	Outage Probability of Selection Combiner over Exponentially Correlated Weibull-gamma Fading Channels for Arbitrary Number of Branches T. S. Bhaskar Reddy, R. Subadar and P. R. Sahu	Improving Time-Frequency Sparsity for Audio Spatialization by Time-Adaptive Windowing P. Gaddipati, Nipun Dave, Preeti Rao and Rajbabu V.	Survivability Analysis under Non-Uniform Stochastically Dependent Node Damages Pallavi M., M. Vereshchaka and D. Manjunath
2:54 pm	Capacity Analysis of Dual -SC and -MRC Systems over Correlated Nakagami- m Fading Channels with Non-identical and Arbitrary Fading Parameters R. Subadar and P. R. Sahu	Support vector regression based autoassociative models for time series classification S. Chandrakala and C. Chandra Sekhar	Detection of Syn Flooding Attacks Using Generalized Autoregressive Conditional Heteroskedasticity (GARCH) Modeling Technique N. Ranjan, H. A. Murthy and T. A. Gonsalves
3:12 pm	Finite-SNR Diversity Multiplexing Tradeoff of SIMO Diversity Combining Schemes under Nakagami- m Fading N. Lavanis and D. Jalihal	Fuzzy Directional Features for Unconstrained On-line Devanagari Handwriting Recognition V. L. Lajish and K. Sunil Kumar	