2011 2nd International Conference on Computer and Communication Technology

(ICCCT 2011)

Allahabad, India 15 – 17 September 2011



IEEE Catalog Number: ISBN:

CFP11ICB-PRT 978-1-4577-1385-9

Table of Contents

Sr. No.	Title	Page No
	Session 1: Advance Database Management System	
1	Design of Web Data Mining in Agents Based E-Commerce Shakti Kundu Paper id. 38	1
2	A Novel Approach for Selecting Informative Genes from Gene Expression Data using Signal-to-Noise Ratio and t-statistics Barnali Sahu and Debahuti Mishra Paper id. 43	5
3	Page Ranking Based on Number of Visits of Links of Web Page Gyanendra Kumar, Neelam Duhan and A. K. Sharma Paper id. 74	11
4	Particle Swarm Optimization Based Fuzzy Frequent Pattern Mining from Gene Expression Data Shruti Mishra, Debahuti Mishra and Sandeep Kumar Satapathy Paper id. 80	15
5	FDCA: A Fast Density Based Clustering Algorithm for Spatial Database System Animesh Tripathy, Sumit Kumar Maji and Prashanta Kumar Patra Paper id. 85	21
6	Cross-Domain Query Answering: Using Web Scrapper and Data Integration Debahuti Mishra and Niharika Pujari Paper id. 253	27
7	Taxonomy of Tree Based Classification Algorithm Daya Gupta, Dilpreet Singh Kohli and Rajni Jindal Paper id. 257	33
8	Different Similarity Measures for Text Classification Using KNN Mohammed Abdul Wajeed and T.Adilakshmi Paper id. 264	41
9	SkewBoost: An Algorithm for Classifying Imbalanced Datasets Vahida Attar, Ashwin Tumma, Akshay Nikam and Saumil Hukerikar Paper id. 431	46
10	Variable Density Spatial Data Clustering Rabinder Kumar Prasad and Rosy Sarmah Paper id. 452	53

Sr. No.	Title	Page No.
	Session 2: Artificial Intelligence	
11	Fuzzy Logic Based AGC Regulators for Power System with Asynchronous Tie-lines Incorporating Parametric Uncertainties Omveer Singh, Ibraheem, and Naimul Hasan Paper id. 14	60
12	Document Image Retrieval Using Signature as Query M.S. Shirdhonkar and Manesh B. Kokare Paper id. 34	66
13	Interactive Content-Based Texture Image Retrieval Pushpa B. Patil and Manesh B. Kokare Paper id. 35	71
14	An Optimal and Dynamic Vehicular Traffic Management System Devendra Kumar Jain, Sanjay Sharma and Manish Yadav Paper id. 42	77
15	Fuzzy Logic Controlled Shunt Active Power Filter for Reactive Power Compensation and Harmonic Elimination Nitin Gupta, S. P. Singh and S. P. Dubey Paper id. 192	82
16	Recognition of Bangla Basic Characters Using Multiple Classifiers Poulami Das, Suchandra Paul and Ranjit Ghoshal Paper id. 225	88
17	Clustering of Scale Free Networks Using a k-medoid Framework Samik Ray and Malay K. Pakhira Paper id. 305	94
18	Detection and Classification of Faults on Six Phase Transmission Line Using ANN Ebha Koley, Anamika Jain, A.S. Thoke, Subhojit Ghosh and Abhinav Jain Paper id. 334	100
19	Online Radiation Mapping of K-130 Room Temperature Cyclotron Using Mobile Robot Monirul Purkait, D. Sarkar, T.K. Bhaumik, R. Ravishankar, Tapas Bandyopadhyay, Satish K. Mishra, S. C. Jena, Kaushik Datta, C. Datta, Biswajit Sarkar, Sanjeev Sharma, Vikrant Agashe and Prabir K. Pal Paper id. 336	104

Sr. No.	Title	Page No
20	Virtual Modem for STB Network Nidhi Agarwal Paper id. 348	108
21	Active Control Systems for Anti-Synchronization based on Sliding Mode Control Satnesh Singh Paper id. 373	113
22	HKDA – Design Pattern System Architecture Lal Bihari Barik, Bankim Patel, Omprakash Chandrakar and Ankita Barik Paper id. 401	118
23	A Light-weight, Dynamic Call Admission Control for Sudden User Influx Management Rakesh Kumar Mishra, Sankhayan Choudhury and Nabendu Chaki Paper id. 408	124
	Session 3: Computer Graphics and Multimedia	
24	Hybrid Image Watermarking Scheme Using SVD and PDFB based Contourlet Transform Swanirbhar Majumder, Monjul Saikia, Tirtha Sankar Das and Subir Kumar Sarkar Paper id. 36	130
25	Shape Descriptors based Handwritten Character Recognition Engine with Application to Kannada Characters G. G. Rajput and Rajeshwari Horakeri Paper id. 186	135
26	A Novel Short Term Prediction Method for Speech using Haar based Time Varying Models Deepa Joy, Prof. R. V. Raja Kumar and Prof. S. S. Pathak Paper id. 232	142
27	Speech Compression Using Different Transform Techniques G. Rajesh , A. Kumar and K. Ranjeet Paper id. 310	146
28	On Human Activity Recognition in Video Sequences Chandra Mani Sharma, Alok Kumar Singh Kushwaha, Swati Nigam and Ashish Khare Paper id. 312	152

Sr. No.	Title	Page No
29	Comparative Analysis of Different Enhancement Method on Digital Mammograms Bikesh Kumar Singh, Shailaja Singh and Dr.(Mrs.) Anamika Yadav Paper id. 316	159
30	Web based Access and Control Environment for Experiment on Electronic Circuits Jagadeesh Chandra A P and C R Venugopal Paper id. 331	164
31	Relevancy Tag Ranking Garima Agrawal, Rashmi Chaudhary and P. K. Singh Paper id. 351	169
32	Bayesian Versus Support Vector Machine based Approaches for Facial Feature Classification in Image Sequences Rajesh A. Patil, Vineet Sahula and A. S. Mandal Paper id. 352	174
33	Syllable Specific Target Cost Formulation for Syllable based Text-to-Speech Synthesis in Bengali N P Narendra and K. Sreenivasa Rao Paper id. 371	180
34	Offline Signature Verification Using Grid based Feature Extraction Swati Srivastava and Suneeta Agarwal Paper id. 379	185
35	An Improved Content Based Image Retreival Asmita Deshmukh and Gargi Phadke Paper id. 385	191
	Session 4: Hardware and Software Design	
36	Vertical Organic Thin Film Transistor to Achieve Sub Ten Micron Channel Length Devices Abdul Rauf Khan, Brijesh Kumar, B. K. Kaushik, S. S. K. Iyer, Y. S. Negi, S.C. Yadav and S. S. Chauhan Paper id. 6	197
37	Comparative Study of Micro Strip Patch Line Feed & Coaxial Feed Antenna Designed Using Genetic Algorithms Shibaji Chakraborty and Uddipan Mukherjee Paper id. 10	203

Sr. No.	Title	Page No.
38	Four Phase Clocking Rule for Energy Efficient Digital Circuits - An Adiabatic Concept Rakesh K. Yadav, Ashwani K. Rana, Shweta Chauhan, Deepesh Ranka and Kamalesh Yadav Paper id. 60	209
39	Jacobix: A Hardwired Instant Jacobian Calculator Amar Banerji, T. A. Dwarakanath, V. R. Tike and D. Venkatesh Paper id. 89	215
40	Simulation and Optimization of Lightly-Doped Ultra-Thin Triple Metal Double Gate (TM-DG) MOSFET with High-K Dielectric for Diminished Short Channel Effects Achinta Baidya, Santosh Kumar Gupta and S. Baishya Paper id. 100	221
41	Pressure Monitoring in Wireless Sensor Network Using Zigbee Transceiver Module Rajesh Singh, Shailesh Mishra and Pankaj Joshi Paper id. 102	225
42	Performance Comparison of MCML and PFSCL Gates in 0.18 μm CMOS Technology Kirti Gupta, Neeta Pandey, Maneesha Gupta, Ranjana Sridhar and Jaya Choudhary Paper id. 105	230
43	Adiabatic Logic: Energy Efficient Technique for VLSI Applications Atul Kumar Maurya and Gagnesh Kumar Paper id. 134	234
44	Variability Analysis and FinFET-based Design of XOR and XNOR Circuit Aminul Islam, Ale Imran and Mohd. Hasan Paper id. 174	239
45	Distributed System Protocol Verification: A Modal Tableau Based Model Checking Approach Tapas Samanta and Dipankar Sarkar Paper id. 197	246
46	Realization of Power Aware Software Prefetching as a Multi-Objective Optimization Problem Sumanta Pyne, Krishanu Ray and Ajit Pal Paper id. 234	253

Sr. No.	Title	Page No.
47	Leakage Power and Delay Analysis of LECTOR Based CMOS Circuits Preeti Verma and R. A. Mishra Paper id. 309	260
48	A Robust Design for Ultra Low Power Operation using Dynamic Threshold SCL Logic Abhinav, Sanjeev Rai and Prof. Rajeev Tripathi Paper id. 320	265
49	MO-CCCCTA based PID Controller employing grounded passive elements Neeta Pandey, Sahil Kapur, Pushkar Arora and Shivam Sharma Paper id. 374	270
50	An FPGA implementation of real-time QRS detection H.K. Chatterjee, R. Gupta, J.N. Bera and M. Mitra Paper id. 409	274
51	Designing of Two Channel Polyphase Quadrature Mirror Filter Bank using Power Optimization Method Ankita Gupta and S. K. Agarwal Paper id. 450	280
	Session 5: Evolutionary Computing	
52	SUSTAINABLE POWERING Configuration of Renewable Sources Exclusively for Powering a House Aakanksha, Abhishek Gupta and Smarti Kotwal Paper id. 9	286
53	Denial of Service Attack in AODV & Friend Features Extraction to Design Detection Engine for Intrusion Detection System in Mobile Adhoc Network Husain Shahnawaz, Gupta S.C and Chand Mukesh Paper id. 126	
54	Dynamic Programming Approach for Solving Power Generating Unit Commitment Problem Prateek Kumar Singhal and R. Naresh Sharma Paper id. 190	298
55	A Genetic Algorithm Based Approach For Prioritization of Test Case Scenarios in Static Testing Chayanika Sharma, Sangeeta Sabharwal and Ritu Sibal Paper id. 249	304

Sr. No.	Title	Page No.
56	High Impact Event Processing using Incremental Clustering in Unsupervised Feature Space through Genetic Algorithm by Selective Repeat ARQ protocol Purna Chandra Sethi and Chinmay Dash Paper id. 308	310
57	An Approach for Data Privacy in Hybrid Cloud Environment Chhanda Ray and Uttam Ganguly Paper id. 325	316
58	Issues, Challenges and Problems in Channel Allocation in Cellular System Mangala Prasad Mishra and P.C. Saxena Paper id. 326	321
59	From Internet of Things Towards Cloud of Things Pritee Parwekar Paper id. 335	329
60	Intonation Modeling using FFNN for Syllable based Bengali Text To Speech Synthesis Ramu Reddy V. and K. Sreenivasa Rao Paper id. 398	334
61	Local Search Based Approach in Grid Scheduling Using Simulated Annealing Rajmohan Goswami, Tarun Ghosh and Subhabrata Barman Paper id. 454	340
S	ession 6: Advance Software Engineering and Distributed and Parallel 1	Processing
62	Neural Network based Software Effort Estimation & Evaluation criterion MMRE Vachik S. Dave and Kamlesh Dutta Paper id. 73	347
63	An Aspect-oriented Conceptual Level Design for Semantic Web based Application Abhijit Sanyal and Sankhayan Choudhury Paper id. 200	352
64	Investigation of Faults in O-O Systems due to Compositional Relationships Preeti Agarwal and Shailendra Mishra Paper id. 231	358

Sr. No.	Title	Page No.
65	Class Cohesion Complexity Metric (C ₃ M) A. Yadav and R.A Khan Paper id. 247	363
66	Impact of Attribute Selection on Defect Proneness Prediction in OO Software Bharavi Mishra and K.K Shukla Paper id. 339	367
67	A Metric Suite for Early Estimation of Software Testing Effort using Requirement Engineering Document and its Validation Ashish Sharma and Dharmender Singh Kushwaha Paper id. 457	373
68	On the Approach of Combining Trust and Security for Securing Mobile Agents: Trust Enhanced Security Priyanka Dadhich, Prof.(Dr.) M.C. Govil and Dr.Kamlesh Dutta Paper id. 125	379
69	Online Accelarated Implementation of the Fuzzy C-means Algorithm with the use of the GPU platform Sharanyan Srikanthan, Arvind Kumar and Vasiya Krishnan Paper id. 130	385
70	Developing Trust Policies for Cloud Scenarios Aradhana and Inderveer Chana Paper id. 152	389
71	Implementing the Dynamic Time Warping Algorithm in Multithreaded Environments for Real Time and Unsupervised Pattern Discovery Sharanyan Srikanthan, Arvind Kumar and Rajeev Gupta Paper id. 380	394
	Session 7: Security	
72	FPGA Based Implementation of FDCT Using Distributed Arithmetic Debashis Chowdhury, Swapan Kumar Samaddar and Amitabha Sinha Paper id. 28	400
73	Protection of Mobile Agent and its Itinerary from Malicious Host Shashank Srivastava and G.C. Nandi Paper id. 40	405

Sr. No.	Title	Page No.
74	Visual Cryptography Improvises the Security of Tongue as a Biometric in Banking System Sowmya Suryadevara, Rohaila Naaz, Shweta Dhatterwal, Shuchita Kapoor and Anand Sharma Paper id. 148	412
75	ID based Secure Key Generation Protocol Dhruti Sharma and Devesh Jinwala Paper id. 240	416
76	WEP Implementation using Linear Feedback Shift Register (LFSR) and Dynamic key Nidhi Gupta and G.P Biswas Paper id. 259	422
77	A Cryptanalytic Attack on the Knapsack Cryptosystem Using Binary Firefly Algorithm Supravo Palit, Saptarshi Neil Sinha, Mostafiz Amin Molla, Atreyee Khanra and Malay Kule Paper id. 272	428
78	A Host Based Intrusion Detection System for DDoS Attack in WLAN Anuradha and Anita Singhrova Paper id. 274	433
79	Modified Elgamal Cryptosystem Algorithm (MECA) Prashant Sharma, Sonal Sharma and Ravi Shankar Dhakar Paper id. 282	439
80	CTES Based Secure Approach for Authentication and Authorization of Resource and Service in Clouds Sanjeev Pippal, Aruna Kumari and Dharmender Singh Kushwaha Paper id. 283	444
	Session 8: Security	
81	Constant Ciphertext Length in Multi-Authority Ciphertext Policy Attribute Based Encryption Nishant Doshi and Devesh Jinwala Paper id. 285	451
82	RSA Algorithm Using Modified Subset Sum Cryptosysrem Sonal Sharma, Prashant Sharma and Ravi Shankar Dhakar Paper id. 291	457

Sr. No.	Title	Page No.
83	Enhancement of security in Visual Cryptography System Using Cover Image Share Embedded Security Algorithm (CISEA) Himanshu Sharma, Neeraj Kumar and Govind Kumar Jha Paper id. 292	462
84	BAAP: Blackhole Attack Avoidance Protocol for Wireless Network Saurabh Gupta, Subrat Kar and S. Dharmaraja Paper id. 344	468
85	An Experimental Analysis for Malware Detection Using Extrusions Sunny Behal and Krishan Kumar Paper id. 377	474
86	An Emulation Based Impact Analysis of DDoS Attacks on Web Services During Flash Events Monika Sachdeva, Gurvinder Singh and Krishan Kumar Paper id. 403	479
87	Security Mechanism for C-Governance Using Hadamard Matrices K. Mukherjee and G. Sahoo Paper id. 428	485
88	Traceback Techniques against DDOS Attacks: A Comprehensive Review Dr. Krishan Kumar, Dr. A.L. Sangal and Abhinav Bhandari Paper id. 441	491
89	A Framework for Vulnerability Minimization -Object Oriented Design Perspective- A. Agrawal and R. A. Khan Paper id. 447	499
	Session 9: Computer Communication	
90	Human Mobility Based Message Transfer in Delay Tolerant Networks – A Single Relay Approach R. J. D'Souza and Johny Jose Paper id. 12	506
91	Analysis of L-Strip Feed Slot loaded Dual Band Microstrip Patch Antenna J.A. Ansari, Ashish Singh, Kamakshi, and Anurag Mishra Paper id. 72	511

Sr. No.	Title	Page No
92	Reverse Scheduling Approach for Burst Loss Minimization in WDM OBS Based Networks Vinay N. Suryawanshi, Laxman D.Netak, Girish V. Chowdhary and Jyoti Borade Paper id. 75	517
93	Discovery of Sensor Web Registry Services for WSN with Multi-layered SOA Framework Manoranjan Parhi, Biswa Mohan Acharya and B Puthal Paper id. 76	524
94	Proposed Cellular Network for Indian Conditions for Enhancement of Spectral Density and Reduction of Power Consumption & RF Pollution Sumit Katiyar, Prof. R.K. Jain and Prof. N.K. Agarwal Paper id. 82	531
95	An Architecture for Integrating Mobile Ad Hoc Network and the Internet Using Cluster Head Gateway Mechanism Ashish Bagwari , Danish Quamar and Sandeep Singh Paper id. 86	536
96	New Proxy Signature Scheme with Message Recovery Using Verifiable Self-Certified Public Keys Namita Tiwari and Sahadeo Padhye Paper id. 110	539
97	Variuos PSK Modulator Scheme for wireless communication Manoj Kumar, Sumit Tripathi, R Gowri, Anurag Vidyarthi and Sribidhya Mohanty Paper id. 142	545
98	CORDIC Based Implementation of Fast Fourier Transform Pooja Choudhary and Dr. Abhijit Karmakar Paper id. 147	550
99	Optimal Transmit Power and Energy Level Performance of Random WSN in Rayleigh Fading Channel Arnab Nandi and Sumit Kundu Paper id. 184	556
100	Throughput Increments Phenomena in Ad Hoc Network Using Potential Transmission Count (PTC) Metric with Protocols Arun Kumar Singh, Amar Deep Gupta and Jitender K. Khurana Paper id. 203	562

Sr. No.	Title	Page No
101	Reliable-AODV Gourav Kumar, Puja Rani and Chiranjeev Kumar Paper id. 215	568
	Session 10: Computer Communication	
102	Performance of Energy Detection Based Spectrum Sensing in Fading Channels Srinivas Nallagonda, Sudheer Suraparaju, Sanjay Dhar Roy and Sumit Kundu Paper id. 266	575
103	A Novel Compact Hexagonal Double Dumbbell Shaped LPF with High Steepness and Wide Rejection Bandwidth Rashid Mahmood, Prof. M.T. Beg, Pramod Kumar and Jugul Kishor Paper id. 276	581
104	Analysis of Spectrum Utilization for Existing Cellular Technologies in Context to Cognitive Radio P.K. Dalela, Aritra Nayak, Vipin Tyagi and K Sridhara Paper id. 315	585
105	Search Engines Evaluation Using Users Efforts Rajesh Kumar Goutam and Sanjay K. Dwivedi Paper id. 323	589
106	Performance Analysis of MANET Routing Protocols for Multimedia Traffic Chhagan Lal, V Laxmi and Manoj Singh Gaur Paper id. 332	595
107	Hybrid Forwarding for Serial and Parallel Wireless Relaying in m-Nakagami Fading Channel Chanchal Kumar De and Sumit Kundu Paper id. 342	601
108	Performance Evaluation of Diffserv Enabled NAT Dibyajyoti Guha and Sant Sharan Pathak Paper id. 366	607
109	Achieving MAC Layer Fairness in Wireless Mesh Backbone Based Vehicular Network Sandip Chakraborty and Sukumar Nandi Paper id. 369	612

Sr. No.	Title	Page No.
110	A Reliable and Total Order Tree Based Broadcast in Wireless Sensor Network Suchetana Chakraborty, Sandip Chakraborty, Sukumar Nandi and Sushanta Karmakar Paper id. 370	618
111	Establishing Social Network Communities between Students Based on Their Internet Usage Patterns Rozita Jamili Oskouei Paper id. 372	624
112	Analysis of Ultra-Wideband Patch Antenna for S, C and X Band Applications Kamakshi, Ashish Singh, Anurag Mishra and J. A. Ansari Paper id. 424	629
Miscellaneous		
113	A Modified Parallel Approach to Single Source Shortest Path Problem for Massively Dense Graphs Using CUDA Sumit Kumar, Alok Misra and Raghvendra Singh Tomar Paper id. 368	635
114	An Elitist Artificial Bee Colony Algorithm for Combined Economic Emission Dispatch Incorporating Wind Power H T Jadhav, Jay Patel, Utkarsh Sharma and Dr. Ranjit Roy Paper id. 376	640
115	Plant Leaf Species Identification Using Curvelet Transform Shitala Prasad, Piyush Kumar and R C Tripathi Paper id. 402	646
116	A Bio Inspired Algorithm for Solving Optimization Problems K. K. Mishra, Shailesh Tiwari and A. K. Misra Paper id. 472	653
117	An Accelerated Clustering Algorithm for Segmentation of Grayscale Images Sitanshu Gupta and Vinay Kumar Srivatava Paper id. 51	660
118	Clustering Method based on Fuzzy Equivalence Relation Ms. Anjali B. Raut and Dr. G. R. Bamnote Paper id. 214	666