

2007 International Conference on Information and Communication Technology

**Dhaka, Bangladesh
7-9 March 2007**

IEEE Catalog Number:	07EX1632
ISBN:	984-32-3394-8

Table of Contents

Simulation Technique & Application Of Space-Vector PWM Method In Pscad/Emtdc	1
<i>S. M. Mueeen, Mohammad Abdul Mannan, Mohd. Hasan Ali, Rion Takahashi, Toshiaki Murata, Junji Tamura</i>	
Effective Performance Of External Sorting With No Additional Disk Space	5
<i>Md. Rafiqul Islam, Md. Sumon Sarker, Sk. Razibul Islam</i>	
Planar Tree Transformation Through Flips.	9
<i>Md. Kamrul Islam, S M Razul Haque</i>	
Mathematical Representation And Analysis Of Rhythms From Various Regions	13
<i>Mohammad Tanvir Irfan</i>	
Visualization Of Complete Graphs, Trees And Series-Parallel Graphs For Practical Applications	17
<i>Md. Abul Hassan Samee Md. Saidur Rahman</i>	
On-Line Algorithms For Vertex-Rankings Of Graphs	22
<i>Muntasir Raihan Rahman, Md. Ehtesamul Haque, Maeenul Islam, Md. Abul Kashem</i>	
An Algorithm For Finding Minimum Degree Spanning Tree Of Series-Parallel Graphs	27
<i>Mohammad Atiqul Haque, Md. Reaz Uddin, Md. Abul Kashem</i>	
E.Cient Generation Of Evolutionary Trees.....	32
<i>Muhammad Abdullah Adnan Md. Saidur Rahman</i>	
A Density-Periphery Based Graph Clustering Software Developed For Detection Of Protein Complexes In Interaction Networks.....	37
<i>Md. Altaf-Ul-Amin, Hisashi Tsuji, Ken Kurokawa, Hiroko Ashahi, Yoko Shinbo, Shigehiko Kanaya</i>	
Microarray Classification And Rule Based Cancer Identification.....	43
<i>Jesmin Nahar, Yi-Ping Phoebe Chen, Abm Shawkat Ali</i>	
Automatic Extraction Of Features From Retinal Fundus Image.....	47
<i>M. Ali Akber Dewan, Mohammad Shamsul Arefin, Muhammad Ahsan Ullah, Oksam Chae</i>	
Contaminated Ecg Artifact Detection And Elimination From EEG Using Energy Function Based Transformation.....	52
<i>M. Ali Akber Dewan, M. Julius Hossain, Md. Moshiul Hoque, Oksam Chae</i>	
Intelligent Agent System For Bio-Medical Literature Mining.....	57
<i>Md. Tawhidul Islam, Durgaprasad Bollina, Abhaya Nayak, Shoba Ranganathan</i>	
Fingerprint Recognition By Chain Coded String Matching Technique	64
<i>Rajib Paul, Mustafa Sarwar Nasif, S. M. Farhad</i>	
Combining Boosting With Negative Correlation Learning For Training	
Neural Network Ensembles.....	68
<i>Kazi Md. Rokibul Alam, Md. Monirul Islam</i>	
Fuzzy Features Extraction From Bangla Handwritten Character.....	72
<i>Mohammed Moshiul Hoque, S. M. Faizur Rahman</i>	
Automatic Music Classification And Retrieval: Experiments With Thai Music Collection	76
<i>Chakpong Nopthaisong, Md Maruf Hasan</i>	
Using Publications And Domain Knowledge To Build Research Profiles: An Application In Automatic Reviewer Assignment	82
<i>Humayun Kabir Biswas, Md Maruf Hasan</i>	
Lexical Semantics: A New Approach To Analyze The Bangla Sentence With Semantic Features	87
<i>Mohammed Moshiul Hoque, Mohammad Jahedur Rahman, Pranab Kumardhar</i>	
Pattern Classification Using Local Linear Wavelet Neural Network	92
<i>B. B. Misra, P. K. Dash, G. Panda</i>	

Table of Contents

Recognition Of Conjunctive Bangla Characters By Artificial Neural Network	96
<i>Abdur Rahim Md. Forkan, Shuvabrata Saha, Md. Mahfuzur Rahman, Md. Abdus Sattar</i>	
An Approach Of Context Ontology For Robust Face Recognition Against Illumination Variations	100
<i>M.Rezaul Bashar, Yan Li, Phill Kyu Rhee</i>	
A New Learning Algorithm For The MAXQ Hierarchical Reinforcement Learning Method.....	105
<i>Farzaneh Mirzazadeh, Babak Behsaz, Hamid Beigy</i>	
Design And Simulation Of Detection Guided Rake Receiver With Improved Snr And Low Bit Error Rate	109
<i>Md. Zulfiquar Ali Bhotto, Md. Ruhul Amin, Md. Ashraful Hoque, Sunit Kumar Ghosh*</i>	
Noise Measurement In Low-Voltage Powerline For Modem Design And Serial Data Acquisition.....	113
<i>Rakesh Chandra Prajapati, Chandra Laxmi Shrestha, Bhupendra Bimal Chhetri</i>	
Performance Analysis Of Ultra-Wideband System In Presence Of Ieee802.11a And UMTS/WCDMA Frequency Bands	117
<i>Rashid A. Saeed, Sabira Khatun, Borhanuddin Mohd Ali, Mohd Khazani A.</i>	
Coded Cooperation Diversity In Wireless Relay Network.....	123
<i>Asaduzzaman, Hyung-Yun Kong, Kim Nae Soo</i>	
Vertical Coupling Between Network Simulator And Ieee802.11 Based Simulator.....	127
<i>Mohammad M. Siddique, Andreas J. Könsen, Carmelita Görg,</i>	
An Improved Interleaver Design For Turbo Codes.....	131
<i>Kashif Nizam Khan, Jinat Rehana, Rameswar Debnath</i>	
Scheduling With Quality Of Service And Fairness In Weakly-Hard Real-Time Systems	135
<i>Maryline Chetto, Audrey Marchand</i>	
Detection Of Space -Time Cluster	139
<i>Iftikhar Sikder, Joseph Woodside</i>	
Implementing And Testing Of Spatio-Temporal And Object-Relational Biodiversity Data Model	144
<i>Mohd Taib Wahid, M Kamruzzaman</i>	
Current Research On Planar Graphs.....	148
<i>Md. Saidur Rahman</i>	
Performance Comparison Of Wavelength Shift Keying And Conventional On Off Keying Schemes In A Multi-Hop Optical Ring Network In Presence Of Four Wave Mixing Cross Talk.....	150
<i>Meer Nazmus Sakib, Sanjoy Dey, S.P. Majumder, Md. Nazmul Alam, Redwan Noor Sajjad</i>	
High Efficiency Inxgal-Xn-Based Multi-Junction Photo Voltaic Cells With Concentrator	155
<i>Md. Rafiqul Islam, Md. Tanvir Hasan, M. A. Rayhan, Ashraful G. Bhuiyan</i>	
Chromatic Dispersion Properties Of A Decagonal Photonic Crystal Fiber	159
<i>S. M. A. Razzak, Yoshinori Namihira, M. A. G. Khan, F. Begum, S. Kaijage,</i>	
Effect Of Variation Of Thickness On Integrated Antenna System In Silicon.....	163
<i>Ashraf Bin Islam</i>	
Performance Analysis Of A Subcarrier Multiplexed Wdm Transmission System Considering SRS And XPM Induced Crosstalk.....	167
<i>Md. Saifuddin Faruk, S. P. Majumder,</i>	
Channel-Spacing Tunable And Multiwavelength Switchable Erbium-Doped Fiber Laser	171
<i>Feroz Ahmed, Naoto Kishi, Tetsuya Miki, Muhammad Golam Mostafa, Abdullahil Kafi</i>	
A Broadcast Fault-Tolerant Hierarchical Tokenbased Mutual Exclusion Algorithm	174
<i>Yasser Mansouri, Mohammad Moallemi, Amin Rasoulifard, Hossain Deldari</i>	
Qos Support In Ad Hoc Networks Based On Cross Layer Design	180
<i>Sadia Aziz, Li La Yuan</i>	

Table of Contents

Dot: A New Distributed Data Management System	184
<i>Aysha Akther, Kazi Shah Nawaz Ripon, Kazi Masudul Alam</i>	
A Three Level Broker Framework For Global Service - Oriented Utility Grid	189
<i>K Narmadha, S Thamarai Selvi</i>	
A Matchmaking Algorithm For Resource Discovery On Grid.....	193
<i>Md. Rafiqul Islam, Md. Zahidul Islam, Nazia Leyla</i>	
Application Of Event B To Modelling Multiagent Interactions	197
<i>Hongjiang Gao, Ying He, Zheng Qin, Liping Shao, Xingchen Heng</i>	
SINR Performance Of Multicarrier Cdma System In Frequency-Selective Rayleigh Fading Channels.....	201
<i>Md. Rezaul Haque Khan, Md. Akbar Hossain, Ahm Razibul Islam, Ju Bin Song</i>	
User Capacity Of Ds-Cdma Cellular Communication Systems Over A Nakagami-M Distributed Multi-Path Fading Channel.....	205
<i>Md. Farhad Hossain, Md. Waliullah Khan Nomani Satya Prasad Majumder</i>	
Modulated (Soft-Decision) Differential Frequency Hopping System.....	209
<i>Yang Baofeng, Shen Yuehong</i>	
Combined CDMA -SDMA Performance Analysis And Code Assignment Algorithm	213
<i>Nidhal Odeh, Sabira Khatun, Borhanuddin Mohd Ali, Alyani Ismail</i>	
Bit Error Rate And Crosstalk Performance In Optical Cross Connect Without Wavelength Converter.....	217
<i>Ngee Thiam Sim, S. P. Majumder, M. S. Islam</i>	
Performance Limitations Of A Subcarrier Multiplexed Optical Transmission System Due To Optical Beat Interference	223
<i>S. Bhowmick, Tanzina Khaleque, Shamim Reza, S. P. Majumder</i>	
Channel-Spacing Tunable And Multiwavelength Switchable Erbium-Doped Fiber Laser	227
<i>*Feroz Ahmed</i>	
Modeling For Performamnce: Systemc Model Of A Communication Bus In A Distributed Network.....	231
<i>Syed Mahfuzul Aziz And Johnson M. D. Tran</i>	
Modified Runlength Coding For Improved Jpeg Performance.....	235
<i>Abhinav Gupta, M. C. Srivastava, Siddhartha Dutt Pandey, And Vimal Bhandari</i>	
Hiding Secret Message In Edges Of The Image	238
<i>Kh. Manglem Singh, L Shyamsudar Singh, A. Buboo Singh, Kh. Subhabati Devi</i>	
A Secure Quantization-Based Watermarking Scheme Using An Improved Statistical Model In The Wavelet Domain.....	242
<i>Soroosh Rezazadeh, Ali Rafiei</i>	
DWT Based Digital Watermarking Technique And Its Robustness On Image Rotation, Scaling, JPEG Compression, Cropping And Multiple Watermarking	246
<i>S.M. Mohidul Islam, Rameswar Debnath, S.K. Alamgir Hossain</i>	
Development And Performance Analysis Of An Adaptive And Scalable Image Compression Scheme With Wavelets.....	250
<i>Kamrul Hasan Talukder, Koichi Harada</i>	
Gpnocsim ... A General Purpose Simulator For Network-On-Chip	254
<i>Hemayet Hossain, Mostak Ahmed, Abdullah Al-Nayeem, Tanzima Zerin Islam, Md. Mostofa Akbar</i>	
Improved Authentication Mechanism Using Keystroke Analysis.....	258
<i>Shiv Subramaniam K.N, Raj Bharath S, Ravinder S</i>	
Data Quality Through Business Rules	262
<i>Vivek Chanana, Andy Koronios</i>	

Table of Contents

A New Optical Spectral Amplitude Coding Sequence: Khazani-Syed (Ks) Code.....	266
<i>Abdullah M.K.</i>	
Performance Analysis Of DSP Processor For OFDM UWB Applications	279
<i>Tony Tsang</i>	
A Hybrid Approach To Pattern Recognition Of A Nonstationary Signal Using Variable Window STFT And Complex Kalman Filter	283
<i>B . N . Biswal, P. K. Dash, G. Panda, P. K. Tripathy</i>	
Evaluation Of Hardware/Software Partitioning Of Conjugate-Structure Algebraic CELP (CS-ACELP) Algorithm Using Matlab	287
<i>Afsaneh Nassery, M.Reza Ghajar, Sara Najafzadeh, M.Amin Khajehnejad, Dr. Behjat Forouzandeh</i>	
Progressive Quality JPEG2000 Image Transmission Over Noisy Channel.....	291
<i>Nusrat Ahmed Surobhi, Md. Ruhul Amin</i>	
Amalgamation Of Singular Value Decomposition To JPEG For Enhanced Performance	295
<i>Nusrat Ahmed Surobhi And Md. Ruhul Amin</i>	
Splines ... A Match For Pulse Shaping Filters With ISI Free Properties.....	299
<i>Ayush Bhandari, N.V.Kalpakam</i>	
Channel-Spacing Tunable And Multiwavelength Switchable Erbium-Doped Fiber Laser	303
<i>*Feroz Ahmed I</i>	
Algorithms For Alignment Of Co-Channel Speech Signals In Adaptive Speech Separation	307
<i>Nicholas J. Cox, Christopher J. Page, Razvan F. Petrescu, Syed Mahfuzul Aziz</i>	
Voiced/Unvoiced Detection Of Speech Signals Using Empirical Mode Decomposition Model.....	311
<i>Md. Khademul Islam Molla, Keikichi Hirose, Nobuaki Minematsu, Md. Kamrul Hasan</i>	
An Extended Algorithm To Enhance The Performance Of The Current NAPT.....	315
<i>Md. Sadek Ferdous, Farida Chowdhury, Jhuton Chandra Acharjee</i>	
Predicting Number Of Attackers Using Regression Anlaysis.....	319
<i>Krishan Kumar, R.C Joshi, Kuldip Singh</i>	
A Call Admission Protocol Of Service Level Agreement In Enterprise Network.....	323
<i>Md Mostofa Akbar, Mohammed Anowarul Hassan, Eric G. Manning, Gholamali C. Shoja</i>	
Proposal And Efficient Implementation Of Detecting And Filtering Method For Ip Spoofed Packets.....	327
<i>Toshinori Ohtsuka, Fumitaka Nakamura, Yuji Sekiya, Yasushi Wakahara</i>	
A Hybrid Jumping Genes Genetic Algorithm Based Request Scheduling Approach In Multiple Destination Routing	331
<i>Md. Mahbubur Rahman, Smritikona Mondol, Gazi Shaheen Hossain, Anup Kumar Dey</i>	
Multiple Disjoint Power Aware Minimum Connected Dominating Sets For Efficient Routing In Wireless Ad Hoc Network	336
<i>Tamaghna Acharya, Samiran Chattopadhyay, Rajarshi Roy</i>	
Security Attack Detection Using Genetic Algorithm (GA) In Policy Based Network.....	341
<i>A.B.M. Alim Al Islam, Md. Ariful Azad, Md. Khurshid Alam, Md. Shamsul Alam</i>	
Router Oriented Traffic Flow Analysis For Ip Backbone Network.....	348
<i>Md. Ariful Azad, A.B.M. Alim Al Islam, Md. Khurshid Alam, Md. Shamsul Alam</i>	
Improved Survivable Routing Algorithm In WDM Mesh Networks.....	352
<i>Lei Guo</i>	