

2010 Sixth International Conference on Wireless Communication and Sensor Networku

(WCSN 2010)

**Allahabad, India
15 - 19 December 2010**



**IEEE Catalog Number: CFP1075D-PRT
ISBN: 978-1-4244-9731-7**

TABLE OF CONTENTS

WIRELESS SENSOR NETWORKS:

SCMRP: SECURE CLUSTER BASED MULTIPATH ROUTING PROTOCOL FOR WIRELESS SENSOR NETWORKS	1
<i>Suraj Kumar, Sanjay Jena</i>	
ON ADAPTIVE HVAC BASED ON A DE-CENTRALIZED ALGORITHM USING K:1 TRANSMISSION PROTOCOL FOR AUTONOMOUS WIRELESS SENSOR NETWORK	7
<i>Addwiteey Chrungoo, Akshay Kumar, Pradeep Kumar, Jai Parkash Godara</i>	
CRITICAL HOPS CALCULATION FOR ENERGY CONSERVATION IN A MULTI-HOP WIRELESS SENSOR NETWORK	13
<i>S. M. Lambor, Sangeeta Joshi</i>	
DYMO AS ROUTING PROTOCOL FOR IEEE-802.15.4 ENABLED WIRELESS SENSOR NETWORKS	19
<i>A. S. Raghuvanshi, S. Tiwari</i>	
A NETWORK CODING BASED PROBABILISTIC ROUTING SCHEME FOR WIRELESS SENSOR NETWORK	25
<i>Rashmi Ranjan Rout, S. K. Ghosh, Saswat Chakrabarti</i>	
OPTIMIZATION OF FUNCTIONAL ALLOCATION TO MAXIMIZE THE LIFETIME OF WIRELESS SENSOR NETWORKS	31
<i>Carlo Brandolese, Luigi Rucco</i>	
RECONSTRUCTION OF AGGREGATION TREE IN SPITE OF FAULTY NODES IN WIRELESS SENSOR NETWORKS	37
<i>Punit Sharma, Partha Sarathi Mandal</i>	
REAL TIME PROBABILITY DENSITY FUNCTION ESTIMATION IN SENSOR NETWORKS	42
<i>Arpita Mukherjee, Uma Datta</i>	
A HETEROGENEOUS SENSOR NETWORK ARCHITECTURE FOR HIGHLY MOBILE USERS	46
<i>Jens Eliasson, Chen Zhong, Jerker Delsing</i>	
SECURE PROGRAM UPDATE USING BROADCAST ENCRYPTION FOR CLUSTERED WIRELESS SENSOR NETWORKS	52
<i>M. B.Nirmala, A. S. Manjunath</i>	
DEVELOPMENT OF THE GROOMING TECHNIQUES FOR REDUCING NETWORK TRAFFIC IN SENSOR NETWORKS	58
<i>R. K. Kushwaha, S. Kar</i>	
RF-CEPAL: A UNIVERSAL REMOTE CONTROL BASED ON MEMS ACCELEROMETER	64
<i>Juhi Ranjan, Hiren Shah, Sanika Joshi, Brijesh Chokhra, Prabhat Ranjan</i>	
OPTIMIZING THE PARAMETERS OF ACTIVE SENSOR SELECTION AND USING GA TO DECREASE ENERGY CONSUMPTION IN POINT COVERAGE WIRELESS SENSOR NETWORKS	70
<i>Ali Shokouhi Rostami, Komeil Nosrati, Hossein Mehrpour Bernety</i>	
DATABASE DESIGN FOR SENSOR NETWORK BASED GLOBAL PATIENT CARE MONITORING SYSTEM	76
<i>Ashutosh Rastogi, Alok Kumar, Shirshu Varma</i>	
RAINBOW SIGNATURE FOR AUTHENTICATION IN WIRELESS SENSOR NETWORK	81
<i>Pradheepkumar Singaravelu, Shekhar Verma</i>	

MANET:

A NEW CLOCK SYNCHRONIZATION ALGORITHM FOR MULTI-HOP WIRELESS AD HOC NETWORKS	86
<i>Hemant Kumar Pande, Sunil Thapliyal, L. C. Mangal</i>	
TRUST BASED SECURED ADHOC ON DEMAND DISTANCE VECTOR ROUTING PROTOCOL FOR MOBILE ADHOC NETWORK	91
<i>R. S. Mangrulkar, Mohammad Atique</i>	

SCALABLE CLUSTER BASED AD HOC ON-DEMAND DISTANCE VECTOR ROUTING PROTOCOL FOR MANET	95
<i>Srinivas Sethi, Siba K. Udgata</i>	
COOPERATIVE BROADCASTING FOR ENERGY CONSTRAINED STATIC WIRELESS AD HOC NETWORKS	101
<i>Tamaghna Acharya</i>	
THROUGHPUT ENHANCEMENT VIA CHANNEL ASSIGNMENT ALGORITHMS WITHIN WIRELESS MESH NETWORKS	107
<i>Sara Mirzaie, Mehdi Agha Sarram, Vali Derhami</i>	
A FAIRED QUALITY OF SERVICE ASSURED MAC PROTOCOL FOR MOBILE ADHOC NETWORK	113
<i>D. D.Seth, Srikant Patnaik, Srikanta Pal</i>	
A HYBRID WIRELESS AD-HOC NETWORK MODEL FOR CRITICAL SERVICES	117
<i>Rajesh Verma, Neeraj Tyagi, Arun Prakash, Rajeev Tripathi</i>	
HOPFIELD NEURAL NETWORK FOR DISJOINT PATH SET SELECTION IN MOBILE AD- HOC NETWORKS	123
<i>Ehsan Hemmati, Mansour Sheikhan</i>	
RSU CENTRIC CHANNEL ALLOCATION IN VEHICULAR AD-HOC NETWORKS	128
<i>Ranjeet Singh Tomar, Shekhar Verma</i>	

WIRELESS CELLULAR NETWORKS:

PERFORMANCE OF A BROADBAND BEAM SPACE ANTENNA ARRAY PROCESSOR WITH IMPROVED INTERFERENCE BEAM	134
<i>Lal C. Godara, Presila Israt</i>	
ANALYTICAL RESULTS FOR BER PERFORMANCE OF RAKE RECEIVER IN RAYLEIGH FADING CHANNEL FOR UMTS ENVIRONMENT	139
<i>Pravindra Kumar, B. K. Kanaujia, M. Gangadharappa</i>	
PERFORMANCE ANALYSIS OF CALL ADMISSION CONTROL FOR MULTI-SERVICE WIRELESS CELLULAR NETWORKS	145
<i>V. Goswami, P. K. Swain</i>	
A FRAMEWORK FOR CONTINUOUS AUTHENTICATION IN UBIQUITOUS ENVIRONMENTS	150
<i>Maksudul A. Chowdhury, Janet Light, William McIver</i>	

COMMUNICATION SYSTEMS:

OUTAGE PROBABILITY OF MULTIHOP WIRELESS CDMA SENSOR NETWORKS WITH CORRELATED INTERFERERS	156
<i>P. K. Sahu, C. Kundu, U. Datta, S. Kundu</i>	
CONCENTRIC CIRCLE MAPPING BASED PTS FOR PAPR REDUCTION IN OFDM WITHOUT SIDE INFORMATION	162
<i>Ashish Goel, Prerana Gupta, Monika Agrawal</i>	
ALTERNATIVE ZIGBEE CODES DERIVED FROM ORTHOGONAL PERFECT DFT SEQUENCES	166
<i>João S. Pereira, Henrique J. A. da Silva</i>	

Author Index