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Hyderabad, Telangana State, India 21-23 July 2016



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#### Friday, 22<sup>nd</sup> of July, 2016 Gandhi Institute of Technology and Management GITAM Hyderabad Campus

Time	Room: Oral Sessions
8:30 - 9:00	Opening Remarks
9:00 - 10:00	Keynote and Invited speakers  Title: Nature Inspired Cryptographic Techniques based on Neural Synchronization Prof. Dr. Jyotsna Kumar Mandal Department of Computer Science & Engineering, University of Kalyani
10:00 - 10:30	Coffee/Tea Break

	Invited speakers
10:30 - 12:30	Title: Cognitive Wireless Sensor Networks Prof. Dr G. Ram Murthy, International Institute of Information Technology, Gachibowli Hyderabad
	Title: Recent Research Trends of Wireless and Optical Communications Networks Prof. Dr A Govardhan,, EC Member & Principal, JNTUHCEH, Telangana, INDIA

12:30 - 1:30	Lunch
1:30 - 3:00	Session 1: WIRELESS: Wireless Communications and Sensor Networks I Room:

## mini-session 1.1: Wireless Communications Networks WCN mini-session Chair:

Travel Management System using GPS & Geo Tagging on Android Platform 1 by Amrah Maryam, Nadia Siddiqui, Mohammed A. Qadeer, M. Sarosh Umar

A Study of Energy Efficient Transmission Protocol in Wirless Sensor Network 7 by *Raman Choudhary, Akshay Deepak, Sujeet Kumar* 

Assessment of Fairness Against Quality of Service Parameters in Wireless Sensor Networks 11 by *Meera A. Thorat, Vivek S. Deshpande* 

Low Profile Collinear Monopole Antenna 16 by Rahil Sinha, Pranav Chetal, Malay Ranjan Tripathy, Priya Ranjan

#### mini-session 1.2: WLAN & WIMAX & IOT & IP mini-session Chair:

Indoor Positioning System Using Wi-Fi & Bluetooth Low Energy Technology 20 by Vibhu Varshney, Rajat Kant Goel, Mohammed Abdul Qadeer

LTE-U over Wi-Fi 26

by Syeda Aasiyah Aijaz Termizi, Safia Rahmat, Mohammed Abdul Qadeer

Design and Implementation of 6LoWPAN Border Router 33

by Praveen Kumar Kamma, Chennakeshava Reddy Palla, Usha Rani Nelakuditi, Ravi Sekhar Yarrabothu

Internet of Things Enabled Smart Switch 38

by Vishwateja Mudiam Reddy, Naresh Vinay, Tapan Pokharna, Shashank Shiva Kumar Jha

Performance Analysis of 4to6 and 6to4 Transition Mechanisms over Point to Point and IPSec VPN Protocols 42 by Shaneel Narayan, Salman Ishrar, Avinesh Kumar, Ruchinav Gupta, Ziafil Khan

#### mini-session 1.3: Simulation, Modeling and Analysis and Performance Evaluation SMAP mini-session Chair:

720-Mbps 64-QAM-OFDM SCM Transmission Over RGB-LED-Based FSO Communication System 49 by *V S Rakesh Krishna*, *Rahul Singhal* 

Design and Analysis Of Phase Locked Loop in 90nm CMOS 54 by Gande Bhargav, Govind Prasad, Srikar Datta Canchi, Badam Chanikya

Performance of Cognitive Radio Overlay Z-Channel with Trellis Shaping and Turbo Decoding 61 by *Abdul Mateen Ahmed, Santu Sardar, Mohammed Zafar Ali Khan* 

Miniaturization of a Novel Rat Race Coupler: A Comparative Analysis 66 by *Harshit Gupta, Aditi Mehta, K Shambavi* 

Comparative Study on Different Feeding Techniques of Rectangular Patch Antenna 69 by Sibi Chakravarthy S, Sarveshwaran N, Sriharini S, Shanmugapriya M

#### mini-session 1.4: MIMO, OFDM & UWB/RFID mini-session Chair:

A New Variant Of Radix-4 FFT 75 by Mohammed Zafar Ali Khan, Shaik Qadeer

Bit Error Rate Analysis of 4G Communication Systems 79 by *C.Padmaja*, *B.L.Malleswari* 

Performance Analysis of Dual Hop Relaying Over Rayleigh Fading Channels 84 by Krishna Patteti, Anil Kumar Tipparti, Kishan Rao Kalitkar, Satish Kanapala, N Merrin Prasanna

Ultra-Wideband Antenna for a Ground Penetrating Radar 89 by Niloy Chakrabarti, Sagar Kalra, Sanjeev Saxena, M.R Tripathy

3:00 - 3:30	Coffee Break
3:15 - 5:15	Session 2: <b>Optical-Optical Communications Networks and Optical Devices</b> Room:

## mini-session 2.1: Optical - Optical Communications Networks and Optical Devices & NM mini-session Chair:

Study of Optical Switching Characterstics in Nano Doped Liquid Crystal 95 by K. Gouthami, D. V. N. Sukanya, S. Lakshminarayana, Y. Usha Devi

Dual Carrier Multiplexed M-QAM signals Modulated Optical SSB Transmission Over Fiber 100 by V S Rakesh Krishna, Rahul Singhal

Reliable ILP Approach of Max-RWA Problem for Translucent Optical Network 105 by *Dinesh Kumar Sah, Hifzan Ahmad, Anchal Uniyal* 

Network Performance Evaluation of VPN Protocols (SSTP and IKEv2) 112 by *Jay Bryan R. Lawas, Allan C. Vivero, Ankit Sharma* 

#### mini-session 2.2: Big Data Analytic/ Cloud Computing /AICT & Devices/Information Security mini-session Chair:

Scheduling Based Cost Estimation Model: An Effective Empirical Approach for GSD Project 117 by S.Ramacharan, K. Venu Gopala Rao

SyncWorld: A Cloud Storage/Synchronization Service using Java and PHP 122 by Rishabh Singh, Aman Abidi, Mohammed Abdul Qadeer

Survey, Study and Review of Coordinate System Notations using 3D Environment for Better Understanding of EM Fields Behavior 127

by K. Sohel Rana, Mohammed Laeeg Shaikh, Sayyad Ajij D.

Multimedia Graphical Grid Based Text Password Authentication For Advanced Users 132 by Shivani Agrawal, Adil Zafar Ansari, M. Sarosh Umar

	Invited speakers Title: Network Coding in Wireless Sensor Networks Assistant Professor Dr. Rashmi Ranjan Rout Computer Science and Engineering National Institute of Technology, Warangal, India Cultural Program
7:30 - 9:30	Dinner by invitation

#### Saturday, 23<sup>rd</sup> of July, 2016 Gandhi Institute of Technology and Management GITAM Hyderabad Campus

Time	Oral Presentation
	Invited speakers
8:30 - 10:00	Title: Significance of Privacy and Security in ICT Prof. Dr. Durgesh Kumar Mishra, Aurobindo Institute of Technology and Research, Indore, MP, India, Chairman, Computer Society of India, Division IV Communication  Title: Energy Efficiency in Next Generation Cellular Networks Assistant Professor Dr. Abhinav Kumar, Department of Electrical Engineering Indian Institute of Technology Hyderabad, India

10:00 - 1	.0:30	Coffee Break
10:30 - 1	.2:30	Session 3: WIRELESS – Mobile Communications/Mobility/ Satellite / Mobile Ad-Hoc and Sensor mesh Network I Room:

## mini-session 3.1: Satellite Communication System/ Mobile and Wireless Communications mini-session Chair:

Aerial Surveillance System using UAV 137 by Zainab Zaheer, Atiya Usmani, Ekram Khan, Mohammed. A. Qadeer

Flower Shaped Antenna for Terahertz Applications 144 by Vaibhav Kathuria, Ankit Yadav, Aquib Malik, Umesh Kumar, Malay Ranjan Tripathy

Near Field Application: NFC Smart Notice Board 147 by Rajesh G.P, Praveenraj Pattar, Divya M.N, Vara prasad

Data Aggregation in Wireless Sensor Network: An Integer Linear Programming Formulation for Energy Optimization 152

by Raman Choudhary, Sujeet Kumar, Akshay Deepak, Dinesh Dash

12:30 - 1:30	Lunch
1:30 - 3:00	Session 4: WIRELESS – Mobile Ad-Hoc and Sensor mesh Network II Room:

#### mini-session 4.1: Mobile Ad-Hoc and Sensor mini-session Chair:

Position Verification Technique for Secure Geographical Routing in MANET 158 by *Aruna Rao S.L, K.V.N.Sunitha* 

A Combined Technique for Attack Monitoring and Risk Assessment in MANET Routing 170 by *Jayashree S Patil, K.V.N.Sunitha* 

Performance Analysis of FMAC Protocol for Reporting Rate in Wireless Sensor Networks 181 by *Dattatray S. Waghole, Vivek S. Deshpande, A.B. Bagvan* 

An Integer Linear Formulation Scheme For Data Collection in Wireless Sensor Network Using Mobile Element(ME) 186

by Sujeet Kumar, Raman Chaudhary, Akshay Deepak, Dinesh Dash

Mobile Travel Guide using Image Recognition and GPS/Geo Tagging A Smart Way to Travel 192 by Ramsha Fatima, Iffat Zarrin, Mohammed A. Qadeer, M. Sarosh Umar

A Side Channel Based Power Analysis Technique for Hardware Trojan Detection using Statistical Learning Approach 197

by Roshni Shende, Dayanand D. Ambawade

#### mini-session 4.2: Mobile, Wireless Sensor Network mini-session Chair:

A Framework to Integrate Cognitive Radio Sensing with Wireless Sensor Network 201 by *Jayashree Agarkhed, Neema Joshi* 

A Mechanism of Preventing Sybil Attack in MANET using Bacterial Foraging Optimization 209 by Sonam Mahajan, Nidhi Dahiya, Devesh Kumar

Diverse Execution Dimensions For Information Conveyance In Distant Sensor Systems 214 by Konda. Hari Krishna, Tapas Kumar, Y. Suresh Babu, N. Sainath, R. Madan Mohan, J. Rethna Virgil Jeny

Loss Recovery Scheme using Adaptive Data Collector Node (ADCN) in Wireless Sensor Network 220 by *S.V.Todkari, Vivek S.Deshpande, A.B.Bagwan*