

Preliminary AH-ICI2009 Conference Program

3rd of November

Tutorials, entire day at:

The AH-ICI2009 conference tutorials location and address on the 3rd of November will be presented at the following location:

Institute of engineering IOE Nepal

Dept. of Electronics and Computer Engineering (DOECE),

Block B, Institute of Engineering,

Pulchowk Campus, Pulchowk, Nepal.

Phone: 977-1-5534070

(1)Introduction to Smart Cards

by *Associate Professor, Dr. Vincent Guyot, ESIEA/LIP6, Paris, France*

(2)Optical Communications Networks and Devices

by *Professor Dr. Alok Kumar Das*

Electronics & Communication Engineering Deptt.

Jadavpur University, Kolkata-700 032, India

(3)Secure Multi-party Computation: Problems, Techniques and Applications

by *Dr. Durgesh Kumar Mishra*

Professor (CSE) and Dean (R&D), Secretary IEEE MP-Subsection,

Acropolis Institute of Technology and Research, Indore, MP, India

4th of November

Location: Hyatt Regency Kathmandu, KATHMUNDU, NEPAL

8:30 - 10:00 **Welcoming & Opening remarks**

Keynote Speeches:

(1) Cognitive Networks: Throughput, Delay Bounds and Routing Issues
by *Professor Dr. Luigi Fratta, Politecnico di Milano, Milano, Italy*

(2) Improvement of Algorithm in the Particle Tracking Velocimetry
by *Prof. Dr. Sashidhar Ram Joshi, head of the Department of Electronics and Computer Engineering, Institute of Engineering, Pulchowk Campus, Nepal*

10:00 - 10:30 **COFFEE BREAK**

10:30 - 12:00 **Session 1: Satellite Communications Systems**

Session Chair: Associate Professor Vincent Guyot, ESIEA/LIP6, France

Regency Ballroom A

Routing Space Internet Based on Dijkstra's Algorithm
by *Xiang-ying Li, Guo-shun Li, Sheng-tian Zhang*

Telemetry Microcomputer Application in Satellites OBC
by *Hossam Eldin Hussein Ahmed, Elkhatib Kamal, Ahmed Elsayed*

NS-2 Network Performance Evaluation of Abis Interface over DVB-S2 in the GSM over Satellite Network
by *S.B.Musabekov, R.R.Ibraimov*

SMC Protocol for Privacy Preserving in Banking Computations Along with Security Analysis
by *Rohit Pathak, Satyadhar Joshi*

Multi-Scale Modeling of Nano Scale Phenomenon using CUDA based HPC Setup
by *Rohit Pathak, Satyadhar Joshi*

Session 2: E- and M- Commerce

Session Chair: Professor Guy Pujolle, LIP6, France

Regency Ballroom A

Emergence of Payment Systems in the Age of Electronic Commerce: The State of Art by *Sumanjeet*

A Comparative Study of a Proxy Memory Buffer for Energy Reduction
by *A. A. Md. Monzur-Ul-Akhir, A.H.M. Saiful Islam, Syed Foysol Islam, Sakeeb Adnan Sagor*

GaTMO: Game Theoretic Trust Model for Peer to Peer Networks
by *GaneshKumar. M*

Session 3: Military Application of Communications and Information Security

Session Chair: Professor Dr. Durgesh Kumar Mishra, Acropolis Institute of Technology and Research, Indore, India

Regency Ballroom B

A Novel Approach for Avoiding Wormhole Attacks in VANET
by *Seyed Mohammad Safi, Ali Movaghar, Misagh Mohammadzadeh*

Estimation of Angle Glint for Different Radar Targets
by *S.Balaji, R.Santhakumar, S.Rajalakshmi*

Modeling and Analysis of DC Traction System under Light of Current
Developments in HPC and Virtual Reality
by *Rohit Pathak, Satyadhar Joshi*

Session 4: Optical Communications and Networking

Session Chair: Professor Daniel J. Blumenthal, ECE, University of California at Santa Barbara, USA

Regency Ballroom B

Performance Analysis of Optical Network based on OADM by using Different Filters

by *M. Irfan Anis, Klodiana Zaka, Naveed Ahmed, Usman Ahmed*

Packet Delay Analysis for Limited Service Bandwidth Allocation Algorithm in EPONs

by *Sailesh Bharati, Poompat Saengudomlert*

An Effective Dynamic Parallel Downloading Scheme with Network Coding in λ -grid Networks

by *Kouji Hirata, Yoshinobu Higami, Shin-ya Kobayashi*

Traffic Statistics and Optical Burst Overlap Reduction in Core Router of OBS Networks

by *Avranil Das, Shamik Chakraborty, Samrat Saha, Alok K Das*

Modeling of FFH-OCDMA System for Local Access Upgrade

by *G. Geetha, M. Meenakshi*

12:00 - 13:30 **LUNCH**

13:30 - 15:00 **Session 5: MIMO and Beam Forming and OFDM**

Session Chair: Prof. Dr. Guy Omidyar, Omidyar Institute USA

Regency Ballroom A

Technique for Channel Estimation in OFDM Transmission System using Linear Interpolation and Euclidean Distance Algorithm

by *Klodiana Zaka, Agha Yasir Ali, M. Irfan Anis, Shariq-uz-Zaman, Irfan Usmani, Naveed Ahmed*

ANN Based Rayleigh Multipath Fading Channel Estimation of a MIMO-OFDM System

by *Kandarpa Kumar Sarma, Abhijit Mitra*

Common Sub-expression Elimination in PAPR Reduction of OFDM System

by *Shahid Haleem, Shoab A.Khan*

Active Noise Control For Real Time Blind Speech Mining Using Single-Channel Noise

by *Syed Foysol Islam, Mushfeq-Us-Saleheen Shameem, A.H.M. Saiful Islam, Sakeeb Adnan Sagor, T.M. Nazmul Huda*

Performance Comparison of the Semi-blind Channel Estimation Methods of MIMO Communication System

by *Jaymin Bhalani, A.I.Trivedi, Y.P.Kosta*

Frequency Synchronization for Multi Input Multi Output Orthogonal Frequency Division Multiplexing Systems

by *Asim Abdullah, Shoab Ahmed Khan*

Symbol Timing Synchronization for IEEE 802.11n WLAN Systems

by *Misuk Cho, Yunho Jung, Jaeseok Kim*

Session 6: Intelligent Transportation Systems

Session Chair: Associate Professor Vincent Guyot, ESIEA/LIP6, France

Regency Ballroom B

Development of an Efficient Radio Communication Scheme for a Mobile Automated Vehicular System

by *T.C. Manjunath, Sangeetha K Siri*

Gravitational Emulation Local Search Algorithm for Advanced Reservation and Scheduling in Grid Systems

by *Behnam Barzegar, Amir Masoud Rahmani, Kamran Zamani Far*

Analysis of Security Issues in SMC based RFID in Supply Chain Management with Energy Modeling

by *Rohit Pathak, Satyadhar Joshi*

Study of Safety and Efficient Routing for Intelligent Transportation System

by *Chang Wu Chen, Xin Chang Chen, I-Hsuan Peng, Yen-Wen Chen*

Recent Trends in RFID and a Java based Software Framework for its Integration in Mobile Phones

by *Rohit Pathak, Satyadhar Joshi*

Session 7: Dynamic Spectrum Access Networks

Session Chair: Professor Luigi Fratta, Politecnico di Milano, Italy

Regency Ballroom B

Signal Processing Techniques for Spectrum Sensing in Cognitive Radio Systems: Challenges and Perspectives

by *Danda B. Rawat, Gongjun Yan*

Energy Modeling in Carbon Nano Tube based Wireless Sensor Networks

by *Rohit Pathak, Satyadhar Joshi*

15:00 - 15:30 **COFFEE BREAK**

15:30 - 17:00 **Session 8: INTERNET Applications**

Session Chair: Professor Rajendra Adhikari, Principal, Nepal College of Information Technology, Balkumari, Lalitpur, Nepal

Regency Ballroom A

Research on Internet-based Open Remote Fault Diagnosis Expert System

by *Huang Yi*

A Novel Scheme of Generating Streamable MP4 Files for Scalable Video Coding

by *Jianping Chen, Dajun Wu, Hai Gao, Jo Yew Tham*

Introducing P2P Architecture in Adaptive Covert Communication System
by *Fedor V. Yarochkin, Shih-Yao Dai, Chih-Hung Lin, Yennun Huang, Sy-Yen Kuo*

Single Sign-on with One Time Password
by *Paras Babu Tiwari, Shashidhar Ram Joshi*

Session 9: Optical Passive and Active Components and Devices
Session Chair: Professor Paul Prucnal, Princeton University, USA
Regency Ballroom A

Theoretical Analysis of Noise Performance of an In_{0.10}Ga_{0.90}Sb Avalanche Photodiode
by *Wasim Hussain, Vashwar Tajdidur Rouf*

Characterization of Microfabricated Multilayered Nearfield Cantilever Array
by *S. Shrestha, S. S. Choi, D.W. Kim, M.J. Park*

Reliability Modeling of MEMS Devices on CUDA Based HPC Setup
by *Rohit Pathak, Satyadhar Joshi*

Design of Optical Logic Gates Using Photonic Crystal
by *A.P. Kabilan, X. Susan Christina, P. Elizabeth Caroline*

Session 10: Ultra Wide Band UWB and RFID
Session Chair: Assistant Professor, R. Nakkeeran
Pondicherry Engineering College, India
Regency Ballroom B

Fourth Generation of Mobile Communication Systems: Evolution, Objectives, Prospects and Challenges
by *Saurav Kumar Subedi*

Power Feeding and Digital Block Design of Multi-standard Passive RFID Tag
by *M. Kothamasu, Roy Paily*

Performance Analysis and Recognition of IR-UWB Signals Using TR System
by *Syed Foysol Islam, Mushfeq-Us-Saleheen Shameem, A.H.M. Saiful Islam, Sakeeb Adnan Sagor, T.M. Nazmul Huda*

A New Compact CPW Fed Slot Antenna for UWB Applications
by *J. William, R. Nakkeeran*

Session 11: Wireless Communications and Networking I
Session Chair: Asst. Professor Mohammed Qadeer, Aligarh Muslim University, India
Regency Ballroom B

Architecture of Stability Routing Protocols in Ad Hoc Wireless Networks
by *Saud Al otaibi, Francois Siewe*

A Low Power Inductive-Coupled Transceiver for Inter-Chip Communication
by *Sanyasi Rao Rupiti, Diptaman Hazarika, Naveen Suda, Roy Paily*

Characterization of Radio Propagation at 60 GHz Channel
by *Achala Deshmukh, S. K. Bodhe*

Banquet dinner

5th of November

Location: Hyatt Regency Kathmandu, KATHMUNDU, NEPAL

Key Note speeches

(1) e-Government Implementation in Nepal

by *Dr. Subarna Shakya, Executive Director, National Information Technology Center, MOEST, Government of Nepal*

9:00 - 10:30 **Session 12: Network Management and Services**
Session Chair: Professor Guy Pujolle, LIP6, France
Regency Ballroom A

Review paper: Comparative Study of Embedded System Architectures for Implementation of ECC
by *Anuja R. Tungar*

Two New Biasing Load Balancing Algorithms in Distributed Systems
by *Iman Barazandeh, S.S. Mortazavi, A.M. Rahmani*

Efficient Testing Environment for Wireless Networking Experiments
by *Mushfeq-Us-Saleheen Shameem, Raihana Ferdous, Syed Foysool Islam, A.H.M. Saiful Islam, Sakeeb Adnan Sagor*

A Cross Layer Approach for Controlling Jitter in MANET Based on Bandwidth Estimation
by *Rekha Patil, A. Damodaram, Rupam Das*

Order-based Localization Scheme in Ad Hoc Sensor Networks
by *Yen-Hsu Chen, Shih-Yi Yuan, Chih-Hsiang Ho, Sy-Yen Kuo*

An ID-Based Routing Protocol for WSN
by *Vahid Torkzaban, Soheila Rahmani, Mehdi Dehghan*

Dynamic Home Agent Assignment in Peer-to-peer Overlay Networks
by *Wally Chen, Sy-Yen Kuo*

Implementation of Virtual Reality and Agents Model Based Nano Domain Simulation an HPC Setup
by *Rohit Pathak, Satyadhar Joshi*

Session 13: Information and Communications Technologies

Session Chair: Professor Alok Kumar Das Electronics & Communication Engineering, Jadavpur University, India

Regency Ballroom B

Development of Piezoelectric and Relaxor Ceramics for Sensor Materials

by *A. Pallavi Singh, B. Ravish Kumar*

Codes for Magnetic Recorders

by *Vinit C. Kotak, B. K. Lande*

An Efficient Voice Over Internet Telephone Call Network (TCN) Model Based on User Perspective for Analyzing the Dynamic Behavior of the Telephone Calls

by *Mushfeq-Us-Saleheen Shameem, Raihana Ferdous*

Supporting Interoperability of e-Science Infrastructures with a Common Information Service

by *A. Memon, M. Riedel, M. Memon, A. Streit, B. Konya, S. Andreozzi*

Performance Analysis of Hybrid Protocol Based on Dynamic Contention Window for Power Line Communication Systems

by *A. Rajesh, M.Rathinasabapathy, R. Nakkeeran*

Session 14: Wireless Communications and Networking II

Session Chair:

Regency Ballroom B

A New Degree Distribution for LT Codes for Broadcasting in Ad-hoc Network Using Network Coding

by *Mohammad Shaheer Zaman, G. RamaMurthy*

Challenges in 802.11 Encryption Algorithms: the need for an Adaptive Scheme for Improved Performance

by *Binod Bhattarai, Bibek Paudel*

10:00 - 10:30 **COFFEE BREAK**

10:30 - 12:00 **Session15 : Architectures, Devices and Security and Privacy I**
Session Chair: Professor Luigi Fratta, Politecnico di Milano, Italy

Regency Ballroom A

Access Control for OSGi-Based Reconfigurable RFID Middleware

by *Bo Du, Songyan Ju, Dong Wang*

HIP-Tags Architecture Implementation for the Internet of Things

by *Pascal Urien, Simon Elrharbi, Dorice Nyamy , Hervé Chabanne, Thomas Icart, François Lecocq, Cyrille Pépin, Khalifa Toumi, Mathieu Bouet, Guy Pujolle, Patrice Krzanik, Jean-Ferdinand Susini*

Uniform Authentication Principals for Multiprotocol NAS Devices

by *Mayuri Khinvasara, Chinmay Soman*

Novel Design of a Wireless Communication Based Automatic Surveillance System for Detection of Suspicious Objects

by *T.C. Manjunath*

Aspect Oriented Approach to Improvement Role Based Access Control Systems
by *Muneer.Hazaa, Abdul Azim Abd Ghani, Ali Mamat, Hamidah Ibrahim*

Mutual Authentication Technique Using Three Entities in 3-G Mobile Communications
by *Chandan Koner, Pijush Kanti Bhattacharjee, Chandan Tilak Bhunia, Ujjwal Maulik*

Security of Access in Hostile Environments Based on the History of Nodes in Ad hoc Networks
by *Saud Al otaibi, Francois Siewe*

Session 16: WLAN and Mobile WIMAX, 3G and 4G Systems
Session Chair: Professor Mohammed Qadeer, Aligarh Muslim University, India

Regency Ballroom B
Security Concerns in WiMAX
by *Syed Shabih Hasan, Mohammed Abdul Qadeer*

Throughput Enhancement of IEEE 802.11 WLAN for Multimedia Communications
by *T.M Nazmul Huda*

Performance Analysis and Throughput Optimization in IEEE 802.16 WiMax Standard
by *Klodiana, Naveed Ahmed, M Ibrar-ul-Haq, M. Irfan Anis, Basil Faria*

An Efficient Frequency Reuse Scheme by Cell Sectorization in OFDMA Based Wireless Networks
by *Arash Boustani, Navid MirMotahhary, Reza Danesfahani, Siavash Khorsandi*

Interference Evaluation and MS Controlled Handoff Technique for FemtoCell
by *Ahmad Ali Habeeb, Mohammed Abdul Qadeer*

A Simplified ASN Anchored Mobility Scheme over Mobile WiMAX
by *Shaoh-Chen Ke, I-Hsuan Peng, Yen-Wen Chen, Tsung-Su Yeh*

Investigating the Performance of Various Vocoders for a Fair Scheduling Algorithm in WiMAX
by *B. Kaarthick, V. J.Yeshwenth, N.Nagarajan, Rajeev*

QoS Coordinated Distributed Scheduling for 802.16 Mesh Networks
by *Li-Der Chou, Yen-Cheng Lin, Zi-Hong Chen*

12:00 - 13:30 **LUNCH**

13:30 - 15:00 **Session 17: Mobile Ad-Hoc and Sensor Mesh Networks I**
Session Chair: Prof. T.M Nazmul Huda
Blekinge Institute of Technology (BTH), Sweden
Regency Ballroom A

A QoS-Based Robust Multipath Routing Protocol for Mobile Adhoc Networks
by *S.Venkatasubramanian, N.P.Gopalan*

Cooperative Data Caching with Prefetching in Mobile Ad-Hoc Networks
by *Naveen Chauhan, L.K. Awasthi, Narottam Chand*

Position Based Routing Protocol With More Reliability In Mobile Ad Hoc Network
by *Mahboobeh. Abdoos, Karim Faez, Masoud Sabaei*

Interference in Wireless Multi-hop Ad-hoc Networks Using Omni-directional and Directional Antennas
by *Bijoy Rahman Arif*

Combat with Black Hole Attack in AODV Routing Protocol in MANET
by *Mehdi Medadian, M.H. Yektaie, A.M Rahmani*

Joint Scheduling and Routing Protocol For Backbone Based MANET's
by *Rekha Patil, A Damodaram, Sridevi Soma*

Multiple Metrics based Load Balancing Routing Protocol for Mobile Ad Hoc Networks
by *Sujatha P. Terdal, V.D Mytri, A Damodaram*

Energy Efficient Cross Layer Routing For Life Time Maximization in Wireless Sensor Networks
by *Kumar Pudashine*

Session 18: Mobility and Mobile Communications

**Session Chair: Associate Professor Vincent Guyot, ESIEA/LIP6, France
Regency Ballroom B**

Active Noise Control for Industrial Applications
by *T.M. Nazmul Huda , Syed Foysol Islam*

Correlation Analysis of the Gold Codes and Walsh Codes in CDMA Technology
by *T.M. Nazmul Huda, Syed Foysol Islam*

Situation-awareness and Sensor Stream Mining for Sustainable Society
by *Zahoor ur Rehman, Muhammad Shaheen*

A Concurrent Blind Multiuser Equalization Scheme for DS-CDMA Systems
by *Abhijit Mitra*

Adaptive Gain Equalizer Algorithm Using Analog Electronic Circuit for Speech Enhancement in Voice over Internet Protocol
by *Syed Foysol Islam, Mushfeq-Us-Saleheen Shameem, A.H.M. Saiful Islam, Sakeeb Adnan Sagor, T.M. Nazmul Huda*

An Enhanced Multipolicy Approach to Vertical Handoff Decision Across WLAN and UMTS Networks
by *A.J. Onumanyi, E.N. Onwuka*

Province of Multiuser M-learning Environment Using Artificial Intelligence & Bluetooth Techniques
by *D.M. Puntambekar, Shailesh Gondal, Manoj Agrawal*

15:00 -15:30 **COFFEE BREAK**

15:30 - 17:00 **Session 19: Simulation, Modeling and Analysis and Performance Evaluations**
Session Chair: Professor Alok Kumar Das Electronics & Communication Engineering, Jadavpur University, India

Regency Ballroom A

Performance Analysis of EXP/PF and M-LWDF in Downlink 3GPP LTE System
by *R. Basukala, H.A. Mohd Ramli, K. Sandrasegaran*

Design of Multiband Fractal Antenna for Mobile and Handheld Terminals
by *Rajeev Kumar Kanth, Alok Kumar Singhal, Pasi Liljeberg, Hannu Tenhunen*

Preeminent Pair of Replacement Algorithms for L1 and L2 Cache for Proxy Server
by *Richa Gupta, Sanjiv Tokekar*

An efficient K-Means Algorithm Integrated with Jaccard Distance Measure for Document Clustering
by *Mushfeq-Us-Saleheen Shameem, Raihana Ferdous*

Performance Comparison of Non-Linear and Adaptive Equalization Algorithms for Wireless Digital Communication
by *Jaymin Bhalani, A.I.Trivedi, Y.P.Kosta*

An Optimum Branching-Based Efficient Distributed Broadcast Scheme For Wireless Ad Hoc Networks
by *Li-Sheng Chen, Jung-Hsien Chen, Hwang-Cheng Wang*

Novel Algorithms for QoS Localized Routing in Communication Networks
by *Turki A. Al Ghamdi, M. E. Woodward*

Cross layer Fair Scheduling for MANET with 802.11 CDMA Channels
by *Rekha Patil, A. Damodaram, Rupam Das*

Session 20: Mobile Ad-Hoc and Sensor Mesh Networks II

Session Chair: Prof. Dr. Guy Omidyar, Omidyar Institute USA

Regency Ballroom B

A Hybrid Protocol for Wireless Sensor Network
by *S M Taiabul Haque*

Additional Sink Placement Strategy in Wireless Sensor Network
by *S M Taiabul Haque, Rehana Tabassum*

PAAR: A Routing Protocol for Context-Aware Services in Wireless Sensor-Actuator Networks
by *Bummo Koo, Junghea Won, Sungbum Park, Hyeonsang Eom*

Clustered and Leveled Disjoint Multipath Routing Algorithm for Wireless Sensor Networks
by *Mohammad Shaheer Zaman, G. RamaMurthy*

Session 21: Architectures, Devices and Security and Privacy II

Session Chair: Professor Dr. Durgesh Kumar Mishra, Acropolis Institute of Technology and Research, Indore, India

Regency Ballroom B

Research and Development of QoS for RFID Middleware
by *Songyan Ju, Dong Wang, Bo Du*

Cellular Phone Based Web Authentication System Using 3-D Encryption
Technique under Stochastic Framework
by *Somsubhra Gupta, Soham Sengupta, Mainak Bhattacharyya, Sandip
Chattrejee, Bishwajeet Sen Sharma*

Research on Trusted Network Model Based on BLP Model
by *Wei Ou, Wenbao Han*

Low Phase Noise 10 bit 5 GHz DCO Using On-Chip CPW Resonator in 0.18 μm
CMOS Technology
by *R. K. Pokharel, K. Uchida, A. Tomar, H. Kanaya, K. Yoshida*

17:00

END OF THE CONFERENCE PROGRAM