

# Preliminary AH-ICI2011 Conference Program

## 4th of November

### Tutorials, Entire day at:

The AH-ICI2011 conference tutorials location and address on the 4th of November 2011 will be presented at the following location:

Institute of Engineering IOE, Kathmandu, Nepal  
Dept. of Electronics and Computer Engineering (DOECE),  
Block B, Institute of Engineering,  
Pulchowk Campus, Pulchowk, Nepal.  
Phone: 977-1-5534070.

### T1

**Title: Optical Communications Networks and Devices**

**Professor Dr. Alok Kumar Das**

Electronics & Communication Engineering Deptt.  
Jadavpur University, Kolkata-700 032, India

### T2

**Title: Data Warehouse Architecture**

**Professor Dr. N.P. Singh**

Professor, Management Development Institute, Gurgaon, India

### T3

**Title: Privacy Preservation in Wireless Sensor Networks using Intelligent Secure Multi-party Computation**

**Professor Dr. Durgesh Kumar Mishra**

Professor (CSE) and Dean (R&D),  
Acropolis Institute of Technology and Research, Indore, MP, India,

## 5th of November

**Location: KATHMANDU-SOALTEE Crowne Plaza**

Crowne Plaza : KATHMANDU-SOALTEE  
TAHACHAL KATHMANDU, KATHMANDU, NEPAL

### Malhar Hall

#### Welcoming & Opening remarks

8:30 - 10:00 AM

Prof. Dr. Ganesh Man Gurung. Chairman, UGC. University Grants Commission Nepal

Mr Bhesh Raj Kanel, Nepal Telecom

Mr Manohar Bhattarai, High Commission on Information Technology, the Government of Nepal

Prof. Dr Timila Yemi, Nepal

## Keynote/Invited Speeches

(1) **Topic: Information and Communications Technology Development in Nepal: Problem and Prospects**

**Associate Professor Dr. Subarna Shakya**

Asst. Dean ( Academic ) , Institute of Engineering, Tribhuvan University

(2) **Topic: To be provided**

**Prof. Dr. Sashidhar Ram Joshi**

Head of the Department of Electronics and Computer Engineering, Institute of Engineering, Pulchowk Campus, Nepal

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

10:30 AM -  
12:30 PM  
Malhar Hall

### **Session 1: Wireless Communications and Networking / Mobility and Mobile Communications I**

**Session Chair: Dr. Durgesh Kumar Mishra, Professor (CSE) and Dean (R&D)  
Acropolis Institute of Technology and Research, Indore, MP, India**

Shortest Path Routing Protocol (SPRP) For Highly Data Centric Wireless Sensor Networks  
by *Nitika Vats Doohan, Durgesh Kumar Mishra, Sanjiv Tokekar*

Co-Operative Media Streaming In Mobile Environments  
by *C Subash, Manil P Manohar, Nikita V Patil, Shylaja S, Parimala N*

An MSS-based Non-blocking Coordinated Checkpointing Approach for Mobile Computing Systems  
by *Mohammad Hadi Asgari, Mehdi Dehghan, Mohammad Reza Salehnamadi*

Three Tier Verification Technique to Foil Session Sidejacking Attempts  
by *Vinay Kumar*

Real – time Download Prediction Based on the  $k$  – Nearest Neighbor Method  
by *Akshata Patil, Sanchita Jha*

### **Session 2: E- and M- Commerce**

**Session Chair: Dr. N.P. Singh,  
Professor, Management Development Institute, Gurgaon, India**

Product Recommendations using Linear Predictive Modeling  
by *Rajendra Banjade, Suraj Maharjan*

Biometric Secured Mobile Voting  
by *Donovan Gentles, Suresh Sankaranarayanan*

12:30 –  
13:30 PM

**LUNCH**

13:30 –  
15:00 PM  
Malhar Hall

### **Session 3: Optical Communications and Networking / Optical Passive and Active Components and Devices**

**Session Chair: Professor Dr. Alok Kumar Das  
Electronics & Communication Engineering Deptt., Jadavpur University, India**

Investigation of FSO Ground-to-Train Communications in a Laboratory Environment  
by *Rupak Paudel, Zabih Ghassemlooy, Hoa Le-Minh, Sujan Rajbhandari, Bryan Livingstone*

Migration of TDM Network into NGN for the Fixed Wire-line Access Network  
by *Subodh Paudel*

A Single Spatial 2D Phase Filter for Channel Demultiplexing in Mode Diversity Multiplexing  
by *Grzegorz Stepniak*

**Session 4: OFDM / Ultra Wide Band UWB and RFID**

**Session Chair: Dr. Sanjeeb Prasad Panday**

**Assistant Professor, Institute of Engineering, Pulchowk Campus, Tribhuvan University**

Joint Power and Subcarrier Allocation in Multi-hop OFDMA Network: A Cross-Layer Approach

by *Satish C. Jha, Umesh Phuyal, Vijay K. Bhargava*

RFID Management for Tracking and Inventory

by *Ankush Agarwal, Geethu Babu, Lovel Rishi, Shruthi KS, Vinu Agarwal*

**Session 5: Wireless Communications and Networking / Mobility and Mobile Communications II**

**Session Chair: Dr. Durgesh Kumar Mishra, Professor (CSE) and Dean (R&D)**

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

MPEG-4 Video Transmission Over IEEE 802.11e EDCA in Multihop OLSR MANET using Cross Layer Approach

by *Amit Kumar Tamang, Teerapat Sanguankotchakorn*

Optimal and Suboptimal Relay Selection and Power Allocation in Multi-relay Cooperative Network

by *Umesh Phuyal, Satish C. Jha, Vijay K. Bhargava*

Generic Framework For Mobile Application Development

by *Divya Sambasivan, Nikita John, Shruthi Udayakumar, Rajat Gupta*

Solar Power of Mobile Transmitter/Receiver Tower Antennas in Remote Areas

by *Tapas K Das, Alok K Das, Avranil Das*

**Session 6: Mobile Ad-Hoc and Sensor Mesh Networks / QoS**

**Session Chair: Dr. Durgesh Kumar Mishra, Professor (CSE) and Dean (R&D)**

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

QoS Routing in MANET Through Cross-Layer Design with BER and Modifying AODV

by *Ram S. Dahal, Teerapat Sanguankotchakorn*

EECR: Energy Efficient Clustering and Routing Approach for Wireless Sensor Networks

by *Kyuhong Lee, Heesang Lee*

15:00 –  
15:30 PM

**COFFEE BREAK**

15:30 –  
17:00 PM  
**Malhar Hall**

**Mini - Session 6: INTERNET Application**

**Session Chair: Dr. N.P. Singh,**

**Professor, Management Development Institute, Gurgaon, India**

Problems and Prospects of Internet in New e-Nepal

by *Hariom Dhungana, Sushil Kumar Sah, Saroj Shakya, Namita Pradhan*

**Session 7: Information and Communications Technologies and Applications**

**Session Chair: Dr. Subarna Shakya,**

**Asst. Dean ( Academic) , Institute of Engineering, Tribhuvan University**

The Ideal Search

by *Parmeshwor Thapa*

Design and Implementation of Sustainable Educational Network using Knowledge Management in Nepal

by *Kumar Pudashine, Vishnu Kumar Rana*

17:30 PM

**Panel Session**

**Panel Title: Compact Waveguide Devices and Switching Implementation in Optical Network**

**Banquet Dinner:**

**Location: KATHMANDU-SOALTEE Crowne Plaza**

**6th of November**

**Location: KATHMANDU-SOALTEE Crowne Plaza**

Crowne Plaza : KATHMANDU-SOALTEE

TAHACHAL KATHMANDU, KATHMANDU, NEPAL

**Key Note/Invited speeches**

**Malhar Hall**

(1) **Topic: Innovative Applications Powered by Next Generation Networks**

**Ravikiran Annaswamy**

Previously Head of Media applications and Value Added Services,

Nokia Siemens Networks India

(2) **Topic: Algorithms for Particle Tracking Velocimetry**

**Assistant Professor Dr. Sanjeeb Prasad Panday**

Assistant Professor Department of Electronics and Computer Engineering, Institute of Engineering,

Pulchowk Campus, Tribhuvan University

9:00 –

10:30 AM

**Malhar Hall**

**Session 8: Network Management and Services**

**Session Chair: Saroj Shakya, Nepal College of Information Technology**

SYN Flood Attack Prevention using Main-Memory Database Management System

by *S. G. Bhirud Vijay Katkar*

A Novel Approach For Improving Search Efficiency In Unstructured Peer To Peer Network

by *M. Sadish Sendil, N. Nagarajan*

Analysis of Jitter Control Algorithms in QoS Networks

by *Jagadish. S, Manivasakan. R*

**Session 9: Information and Communications Technologies and Application II**

**Session Chair: Niranjana Khakurel, NCIT, Lalitpur, Nepal**

SSENet-2011: a Network Intrusion Detection System Dataset and its Comparison with KDD CUP 99 Dataset

by *Vasudevan, A.R., E. Harshini, S. Selvakumar*

An Advanced Segmentation Using Bit-Plane Slicing Technique in Extraction of Lungs Region

by *Thapaliya Kiran, Goo-Rak Kwon*

Comparison of Characterizing and Data Analysis Methods for Detecting Abnormalities in ECG

by *Veena N. Hegde, Ravishankar Deekshit, P.S.Satyanarayana*

Light Weight Approach for IP-ARP Spoofing Detection and Prevention

by *S. G. Bhirud, Vijay Katkar*

10:00 –  
10:30 AM

**COFFEE BREAK**

10:30 AM -  
12:30 PM  
Malhar Hall

**Session 10: Simulation, Modeling and Analysis and Performance Evaluations / Architectures, Devices and Security and Privacy I**

**Session Chair: Dr. Durgesh Kumar Mishra, Professor (CSE) and Dean (R&D) Acropolis Institute of Technology and Research, Indore, MP, India**

Provisioning Secure On-demand Routing Protocol in Mobile ad hoc Network

by *Binod Vaidya, Dimitrios Makrakis, Hussein Mouftah*

Cisco Smart Automation Tool

by *Radhika Srikanth, Suthikshn Kumar, Sai Arun Junjarampalli*

12:30 –  
13:30 PM

**LUNCH**

13:30 –  
15:00 PM  
Malhar Hall

**Session 11: Wireless Communications and Networking / Mobility and Mobile Communications III**

**Session Chair: Dr. Durgesh Kumar Mishra, Professor (CSE) and Dean (R&D) Acropolis Institute of Technology and Research, Indore, MP, India**

Power and Time-Sharing Optimization for Three Half-Duplex Relay Networks

by *P. Baracca, S. Tomasin, N. Benvenuto*

Developments in Orthogonal Frequency Division Multiplexing(OFDM) System-a Survey

by *Suma M N, Kanmani.B*

A Superposition Modulation Based Cooperative Transmission Scheme in Regenerate-and-Forward Relaying Networks

by *Chia-Yang Chiang, Satish C. Jha, Vijay K. Bhargava*

15:00 –  
15:30 PM

**COFFEE BREAK**

15:30 –  
17:00 PM  
Malhar Hall

**Session 12: Simulation, Modeling and Analysis and Performance Evaluations / Architectures, Devices and Security and Privacy II**

**Session Chair: Dr. Sanjeeb Prasad Panday Assistant Professor, Institute of Engineering, Pulchowk Campus, Tribhuvan University**

Improvement in Spatial Queries by using Fuzzy Control System in Spatial Measurement  
by *Alok Tiwari, Suresh Jain, Amitabh Mishra*

A Comparative Study of Synchronization Algorithms in Distributed Systems  
by *A.S.Kavitha Bai, Jitendranath Mungara*

**END OF THE CONFERENCE PROGRAM**